

FIG. 3A

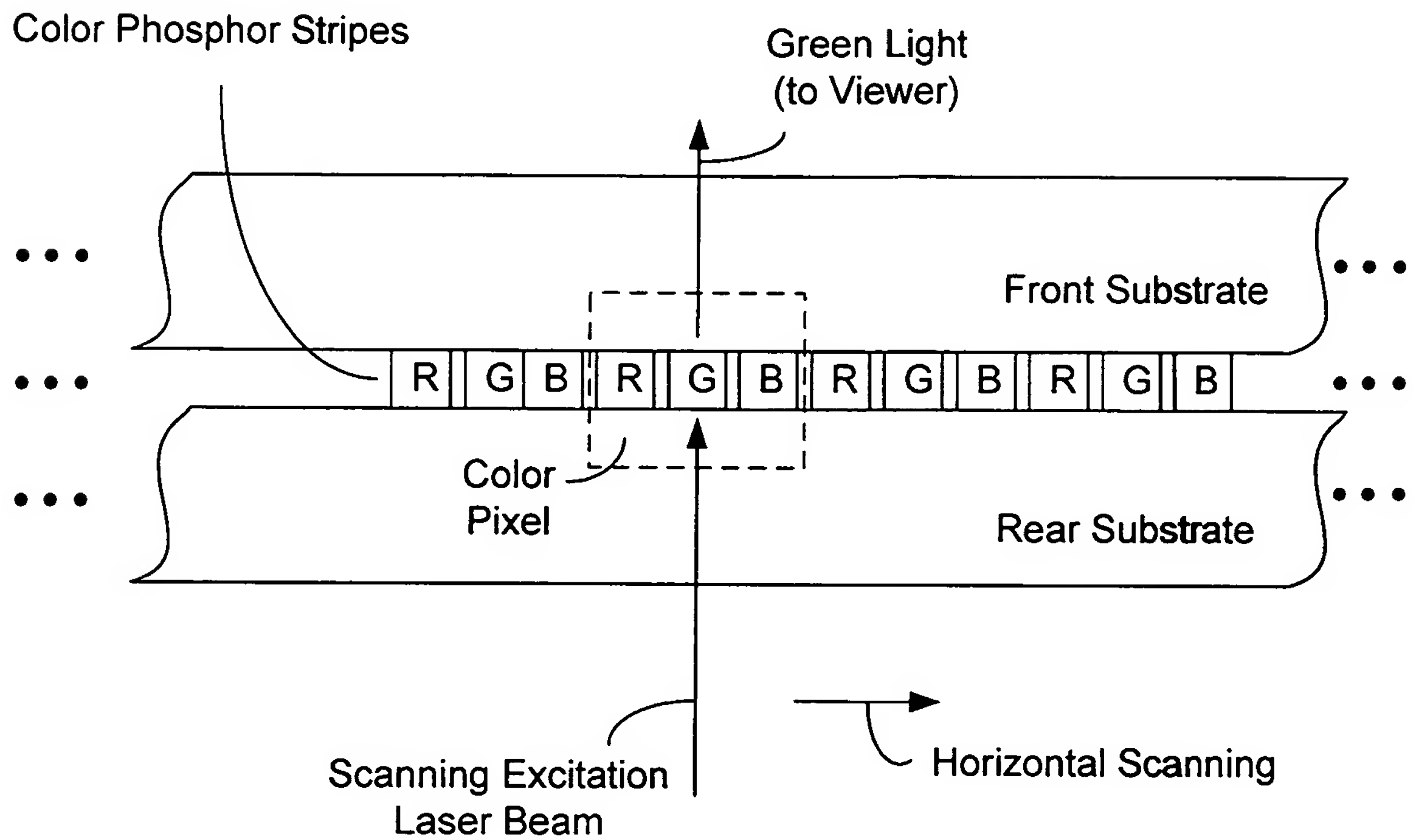


FIG. 3B

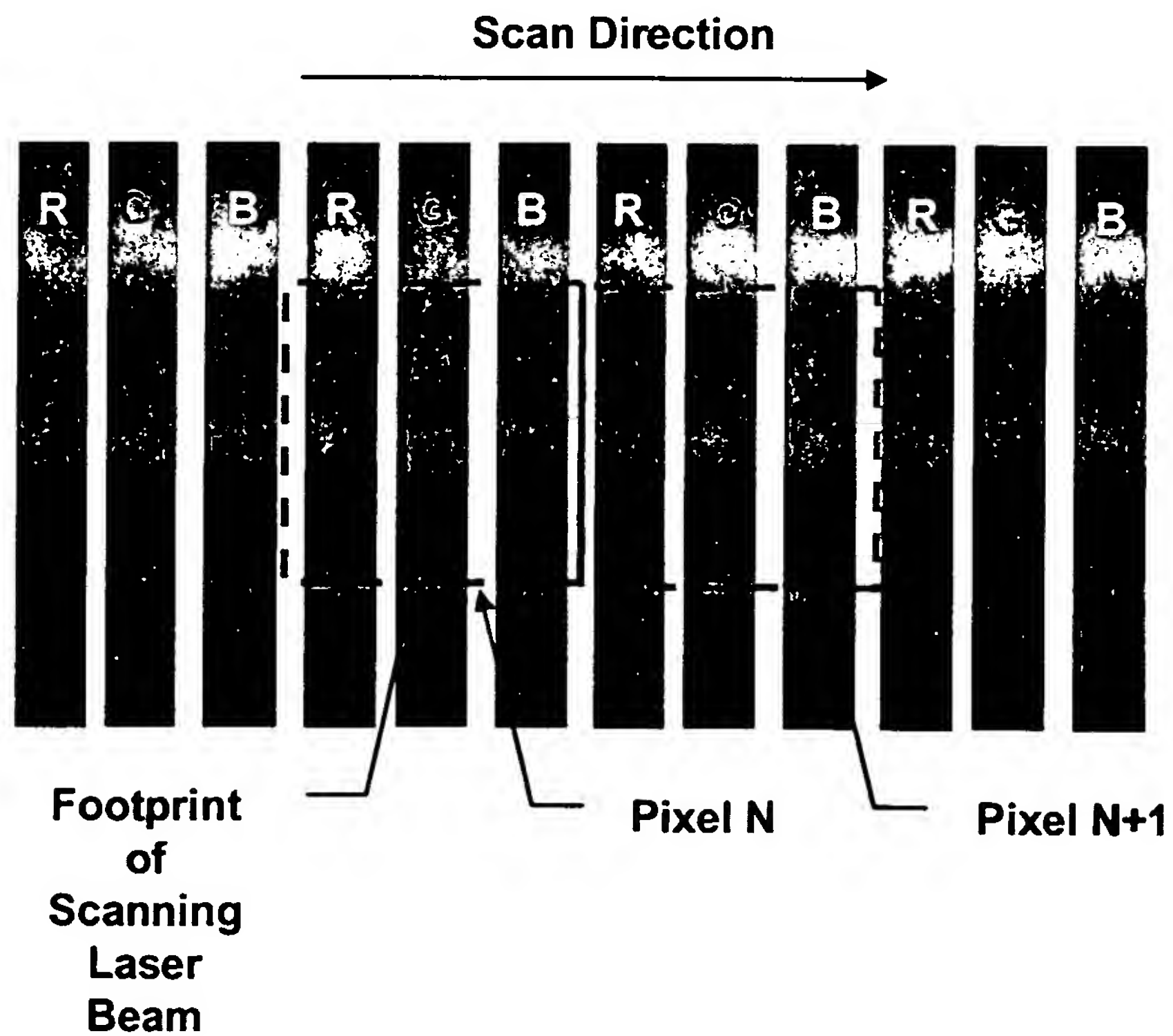


FIG. 4

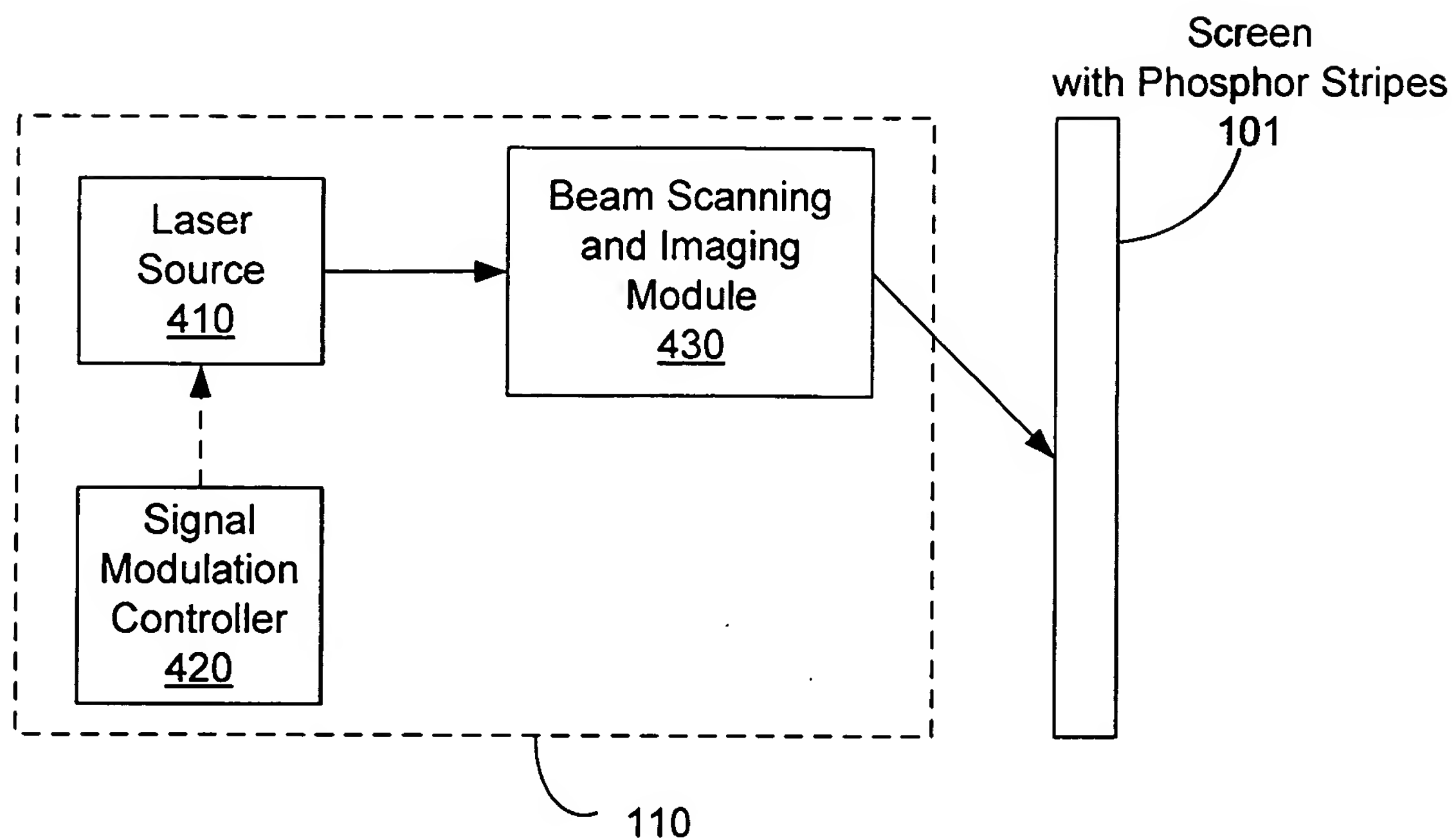


FIG. 5

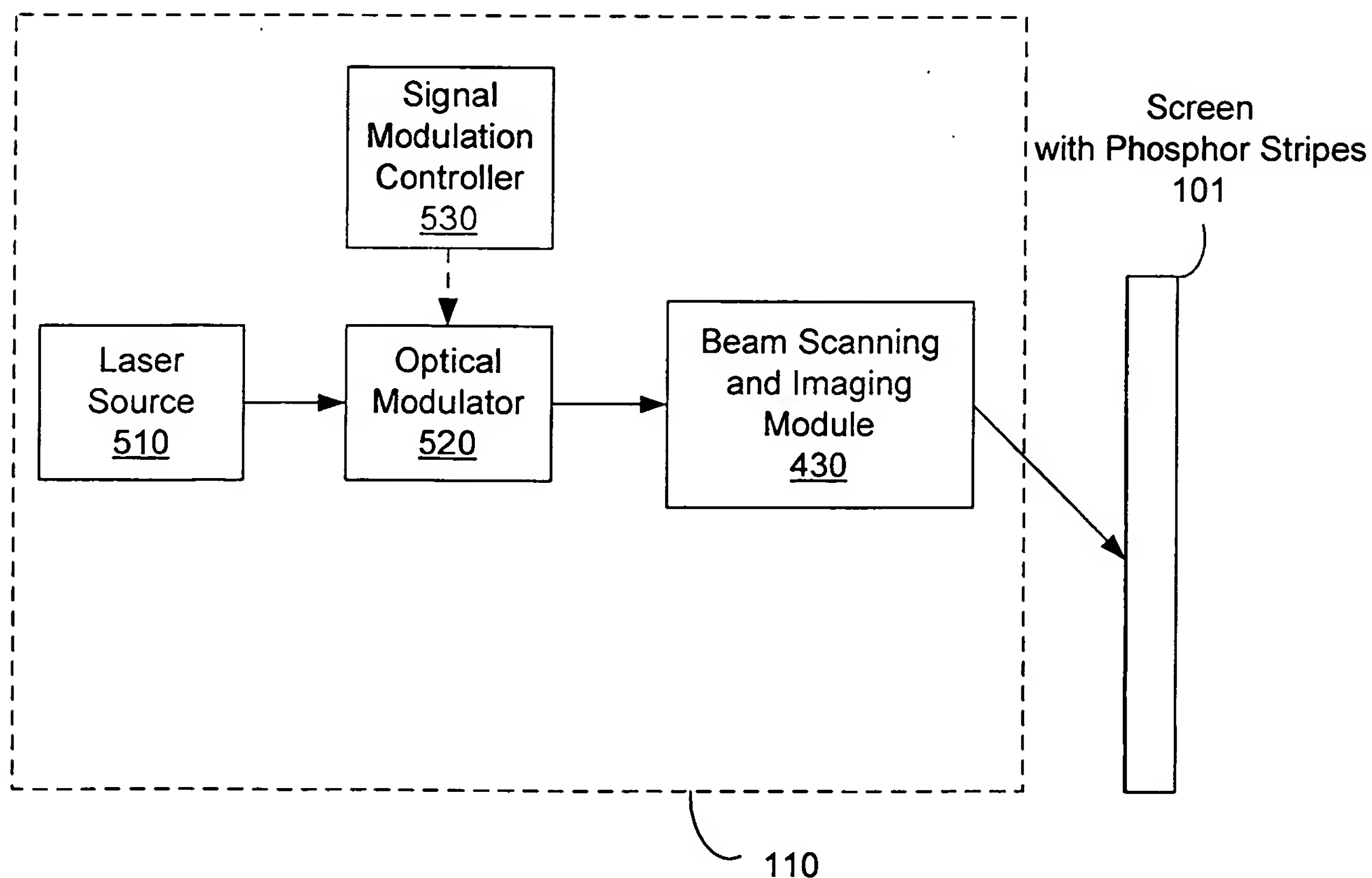


FIG. 6

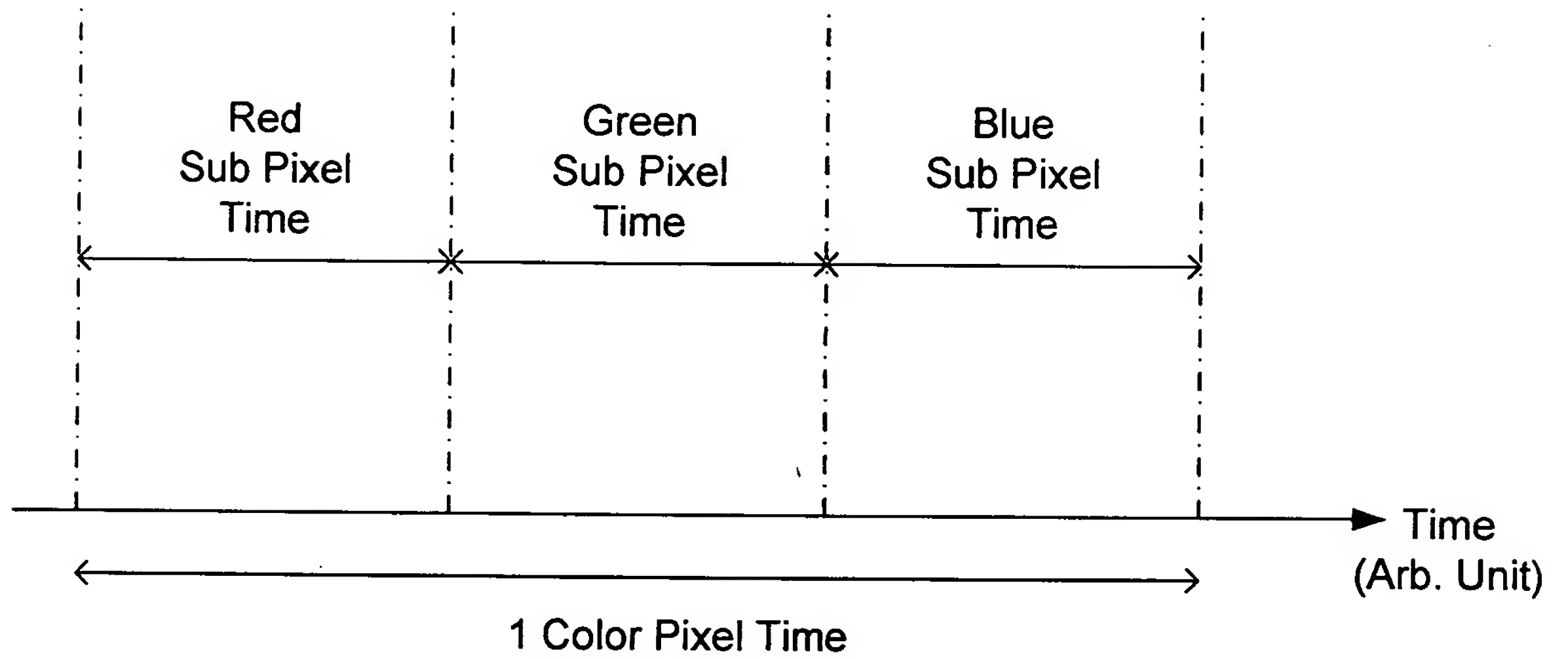
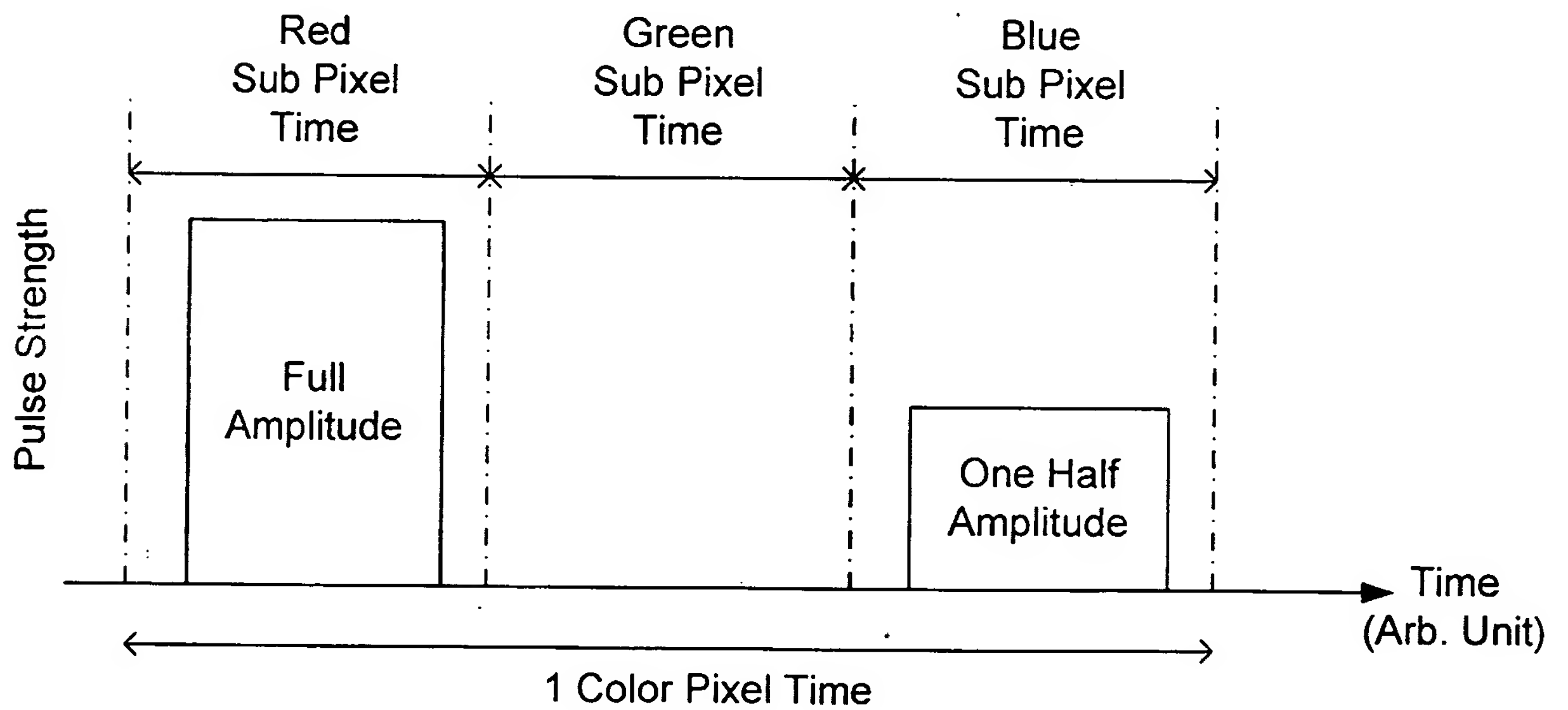


FIG. 7



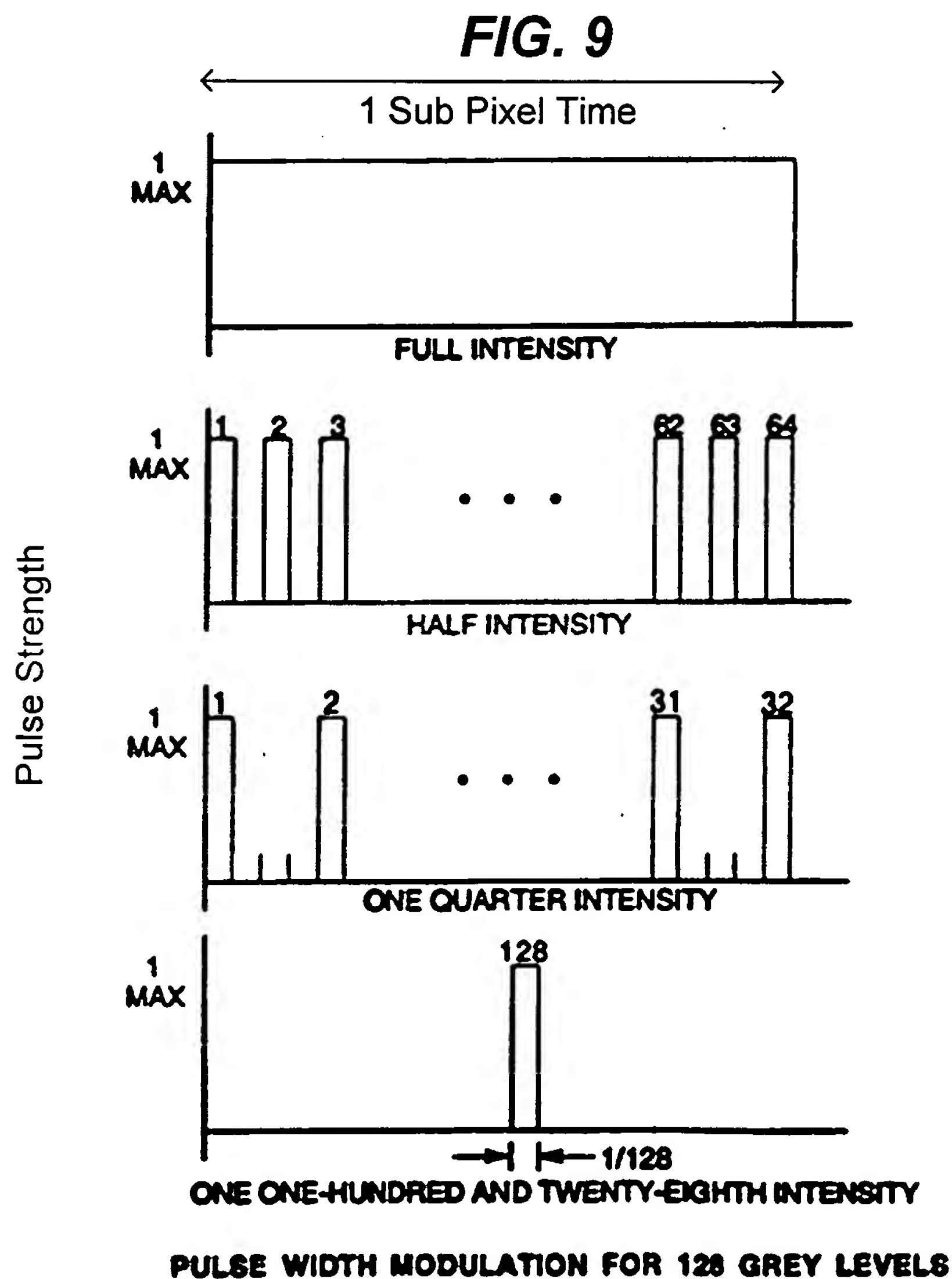
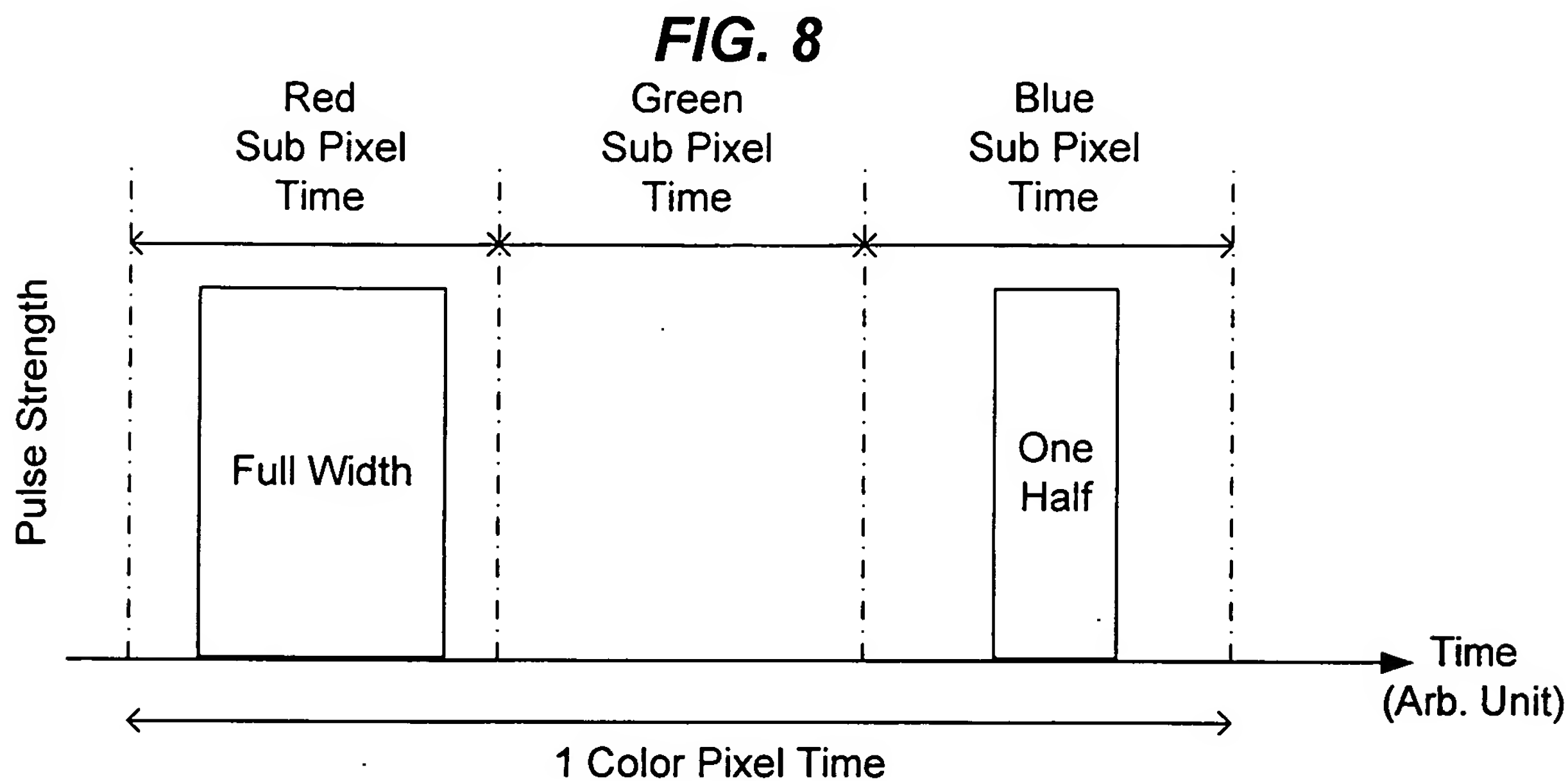


FIG. 10A

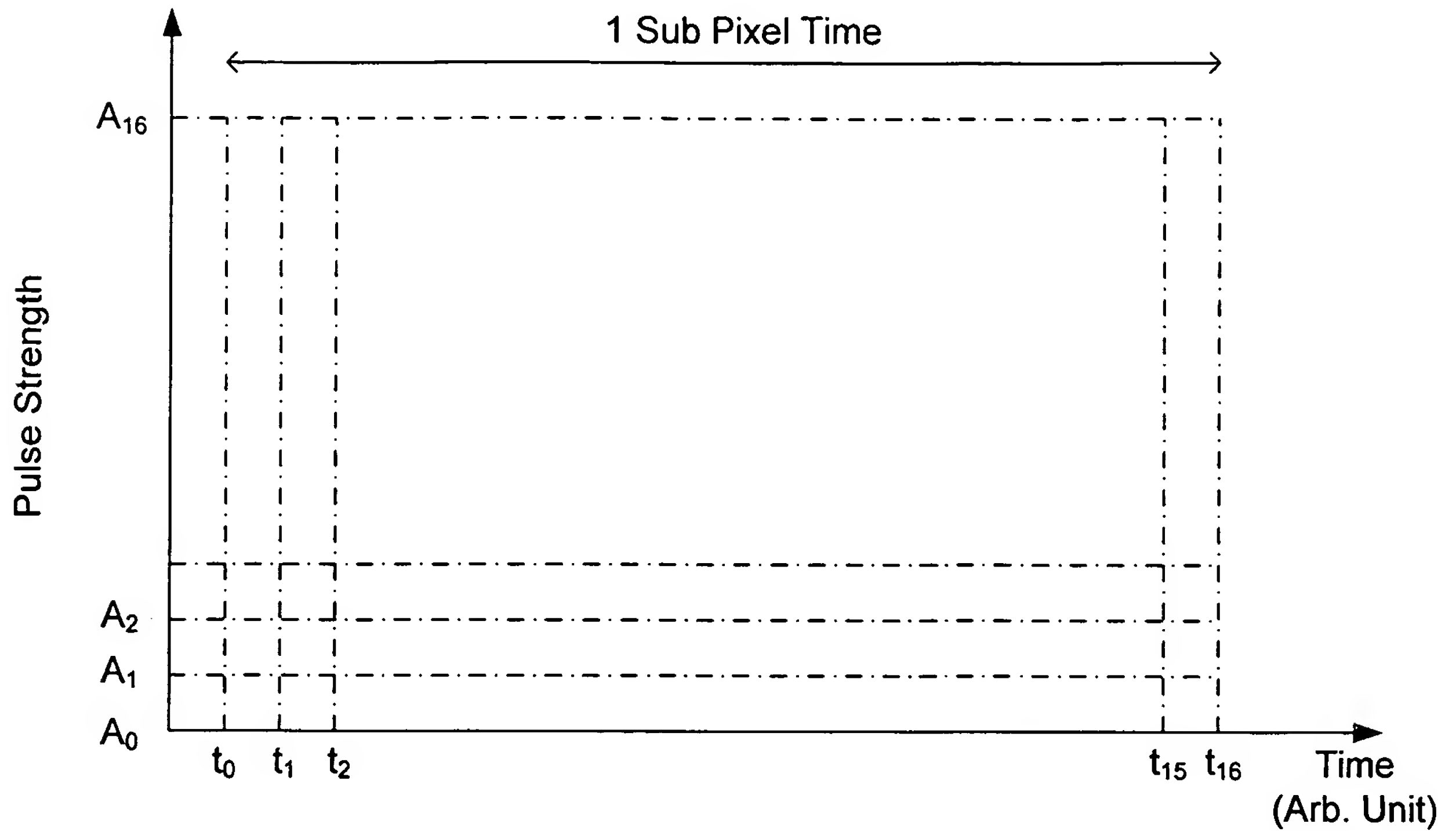


FIG. 10B

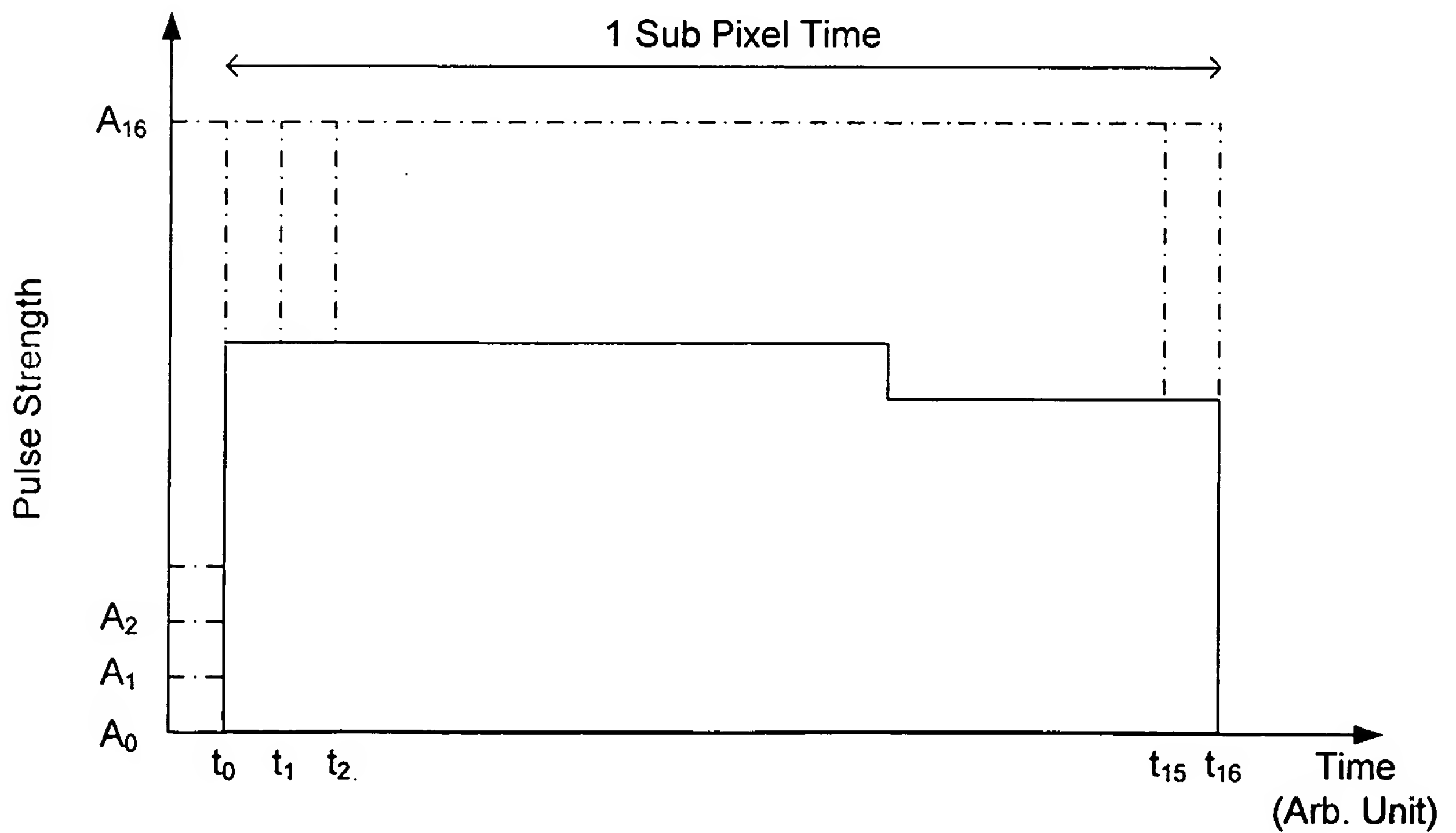


FIG. 11

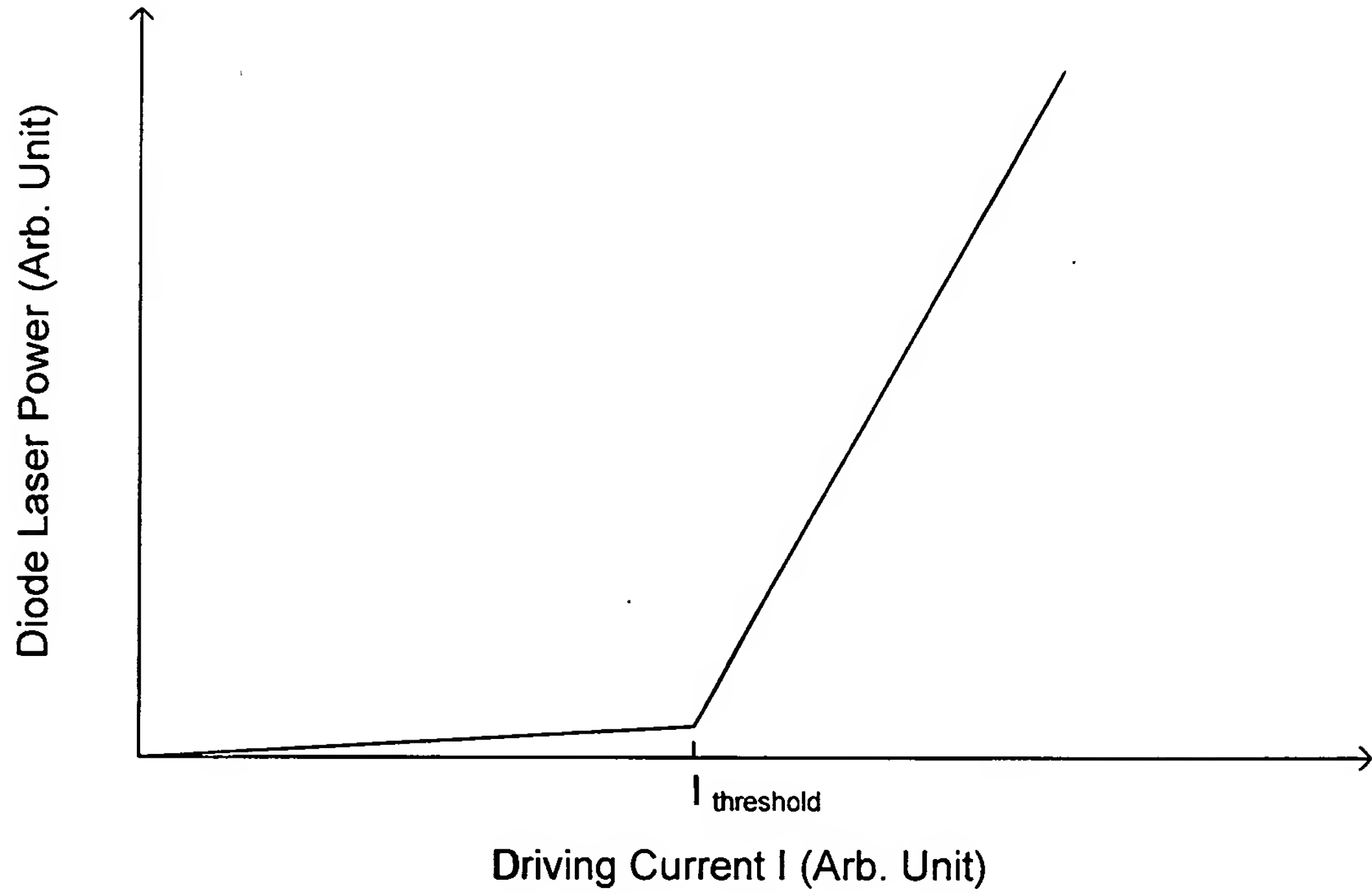


FIG. 12

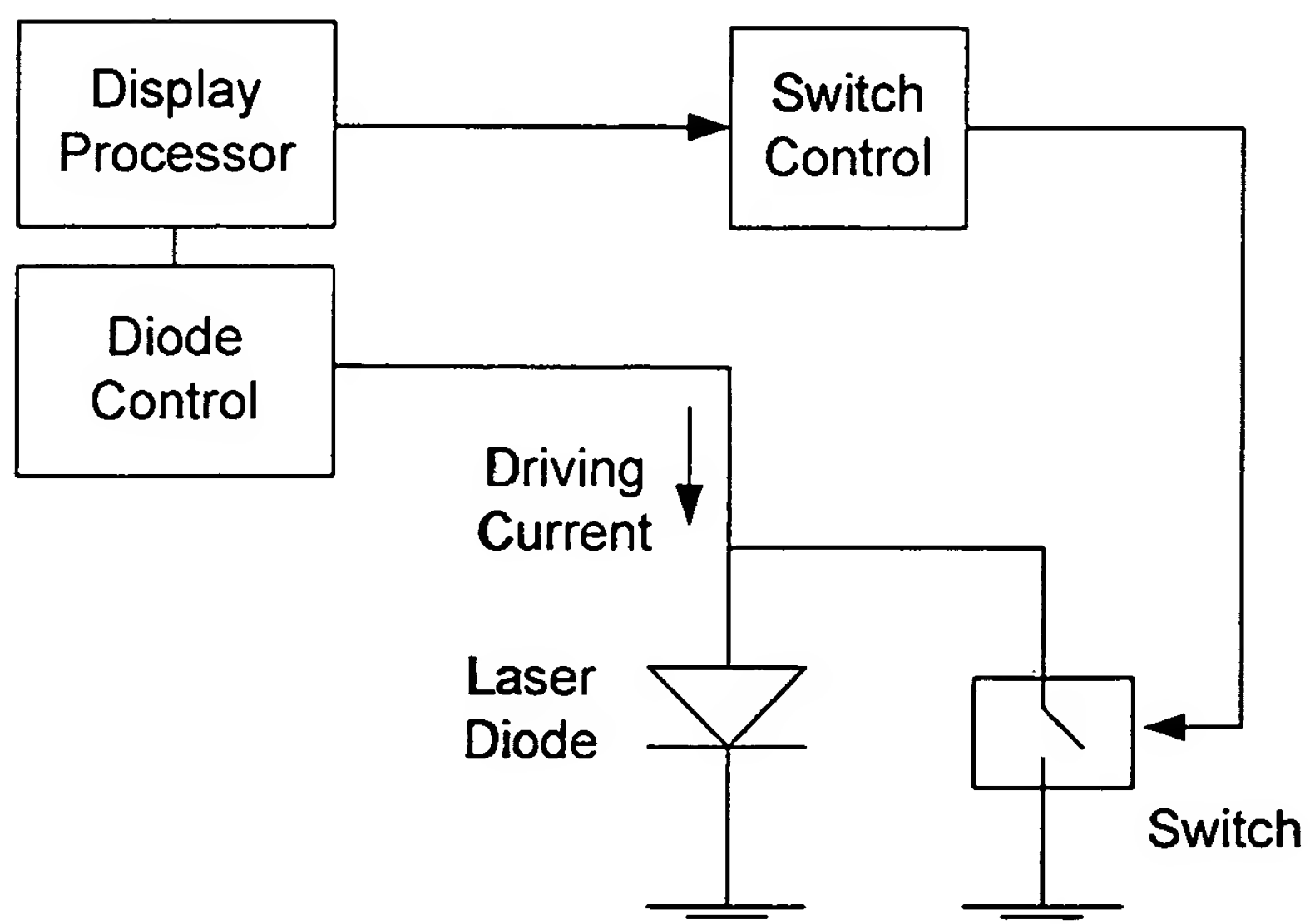


FIG. 13

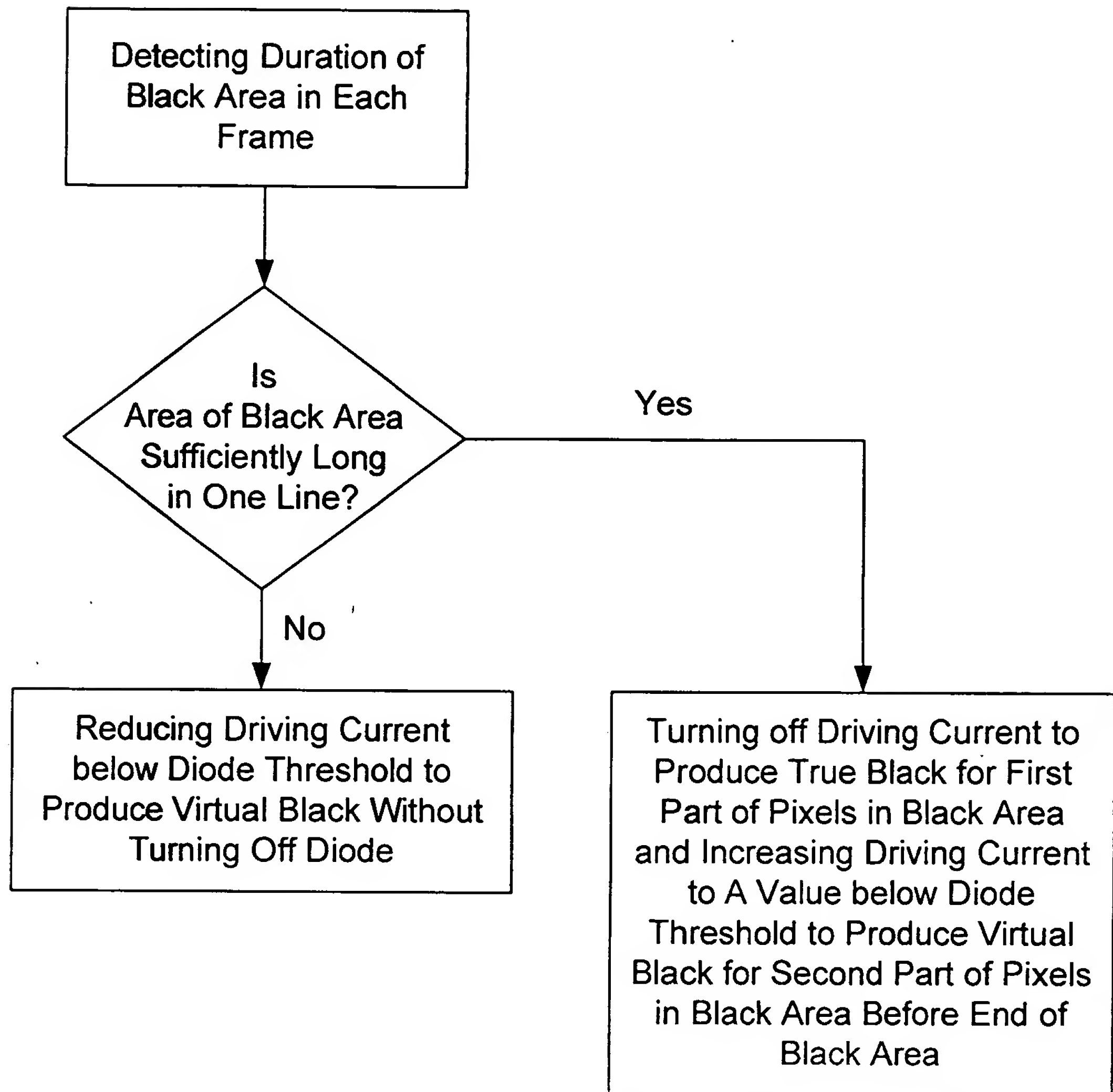


FIG. 14

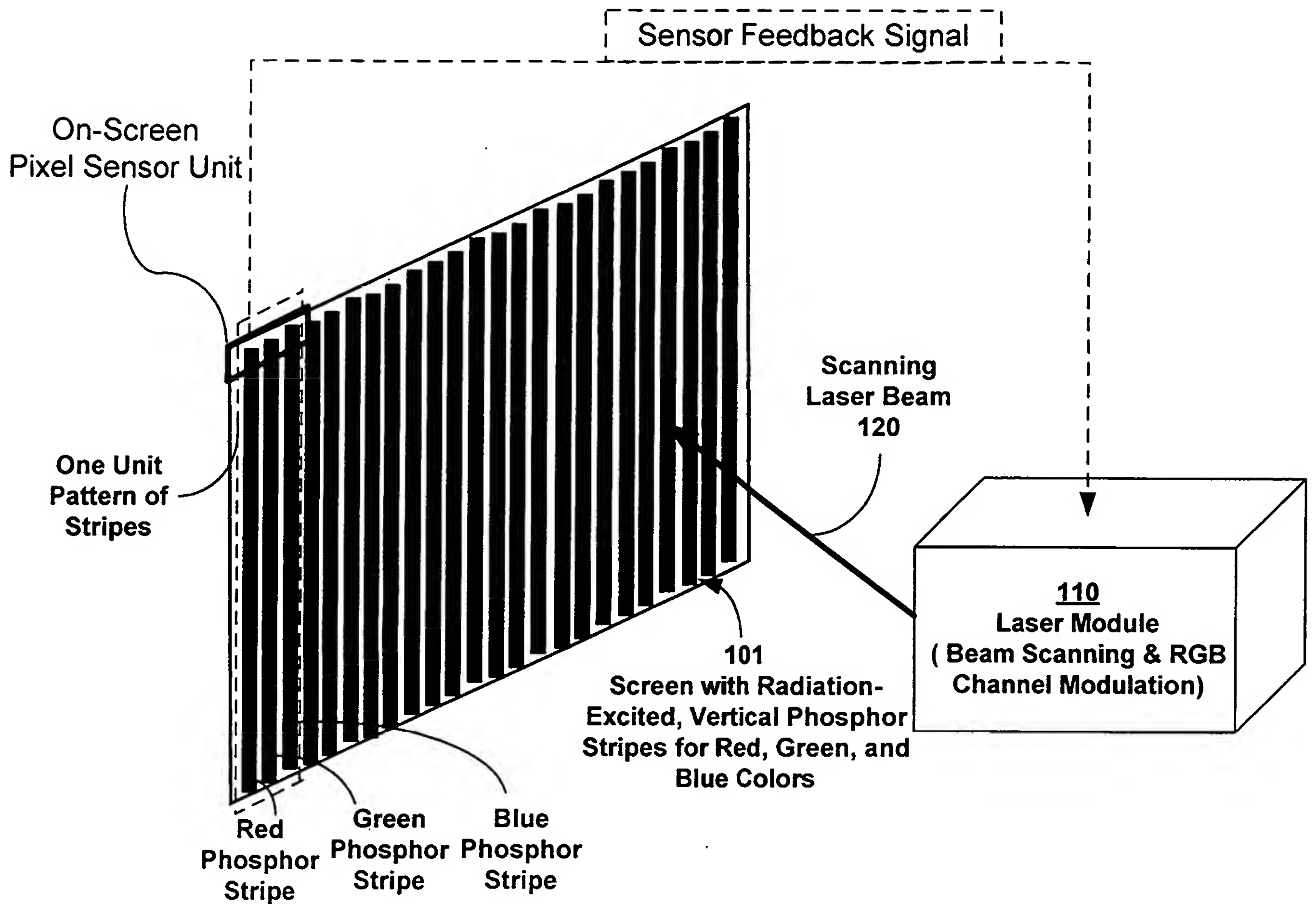
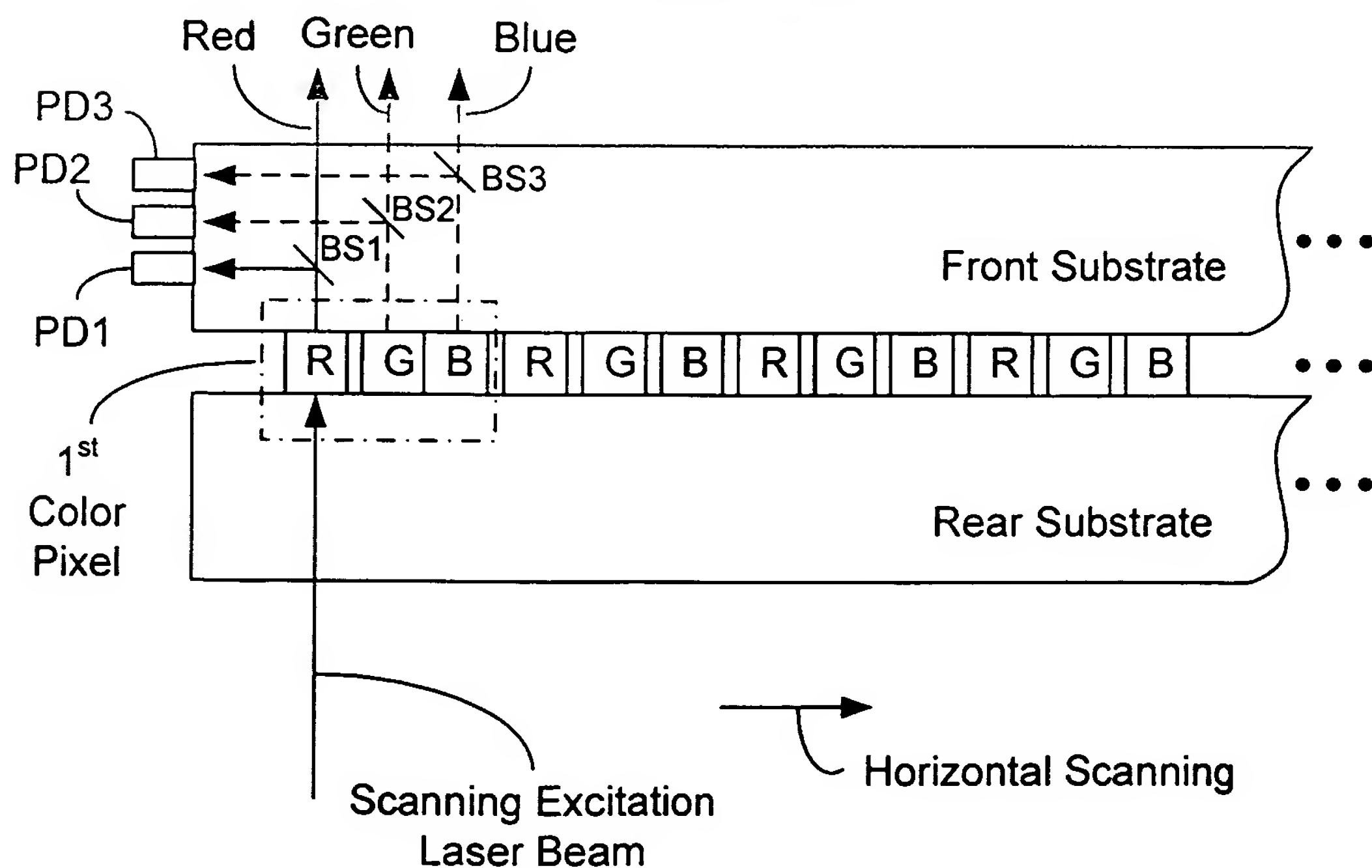


FIG. 14A



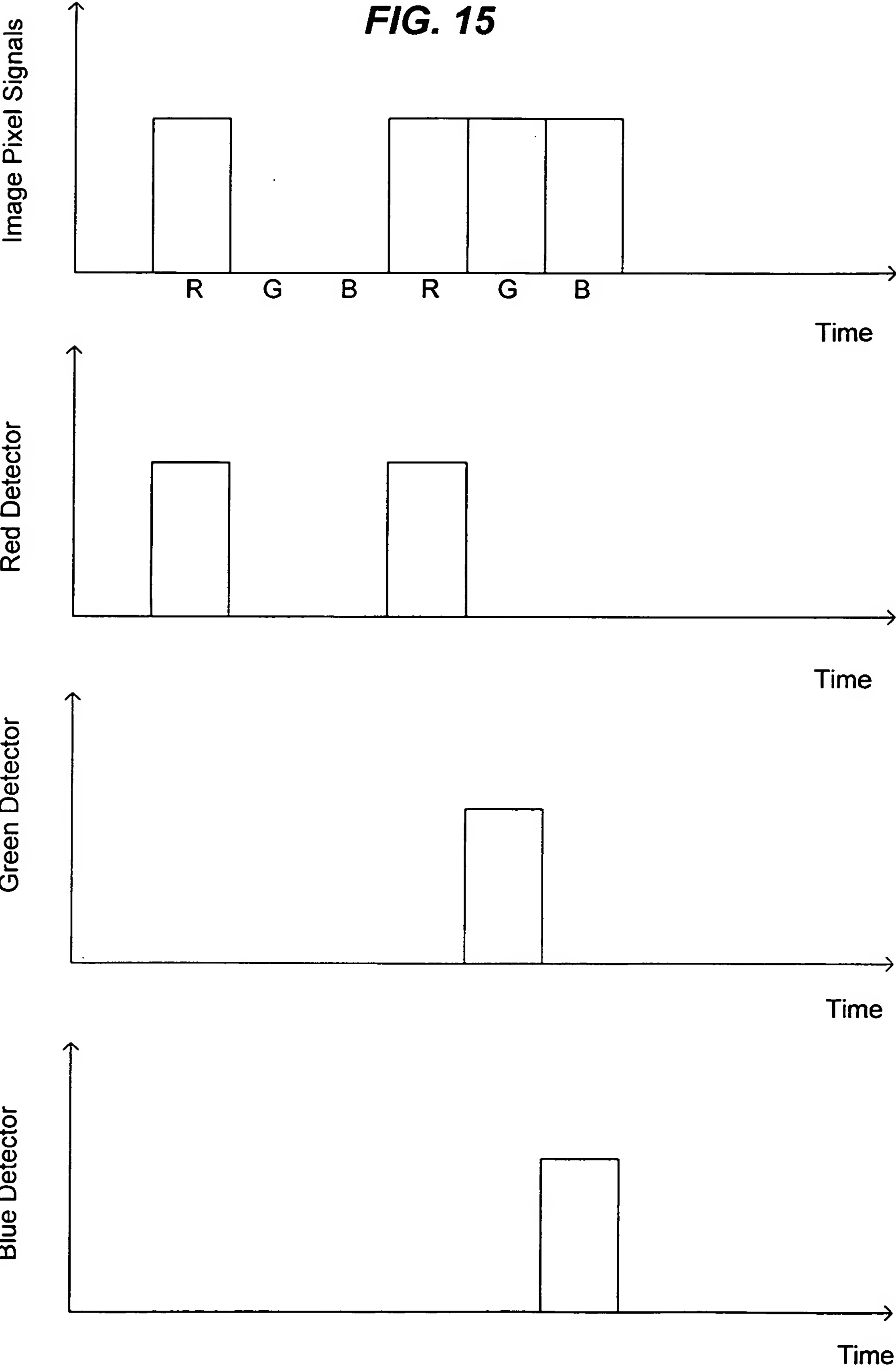


FIG. 16

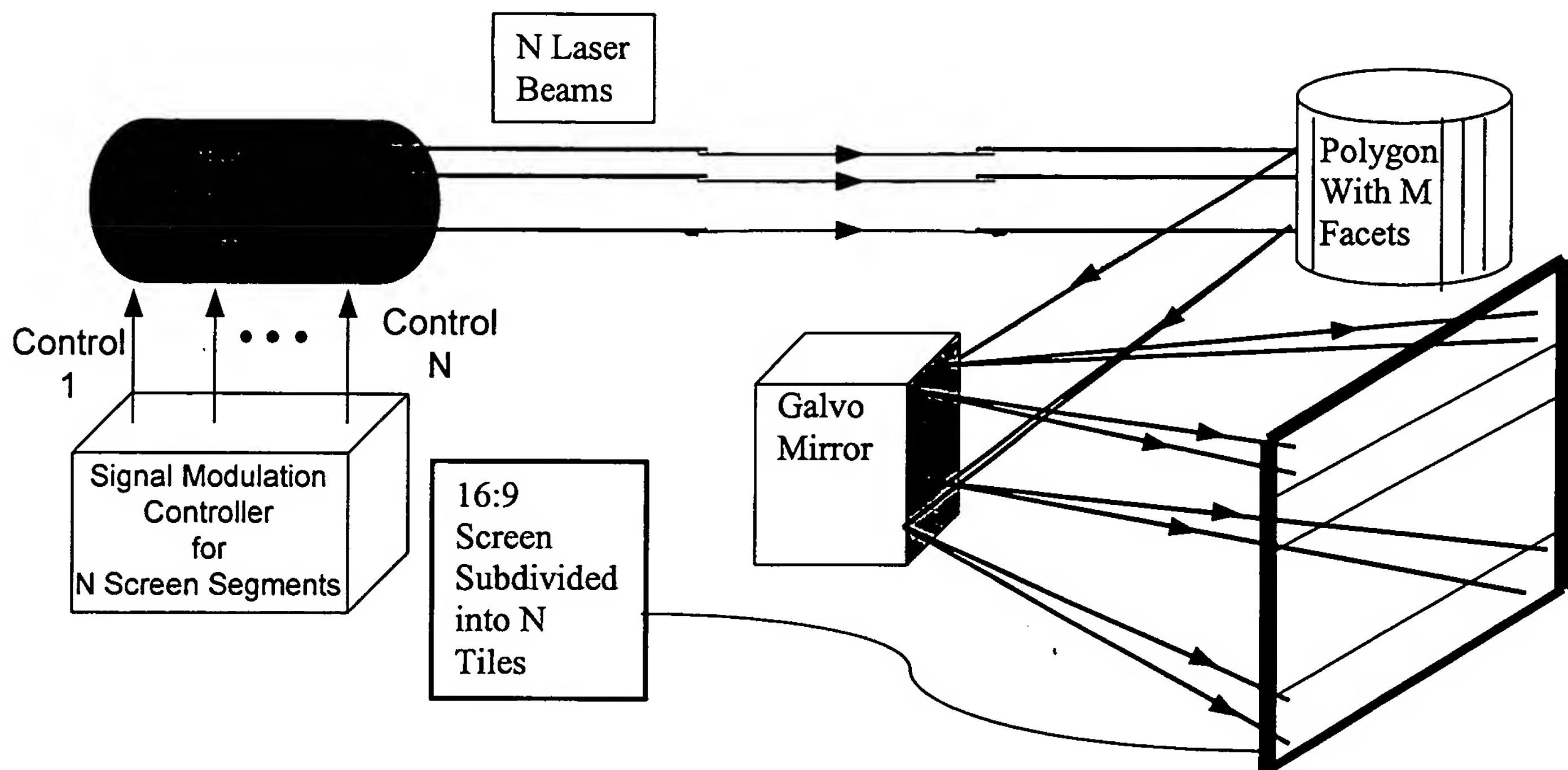


FIG. 17

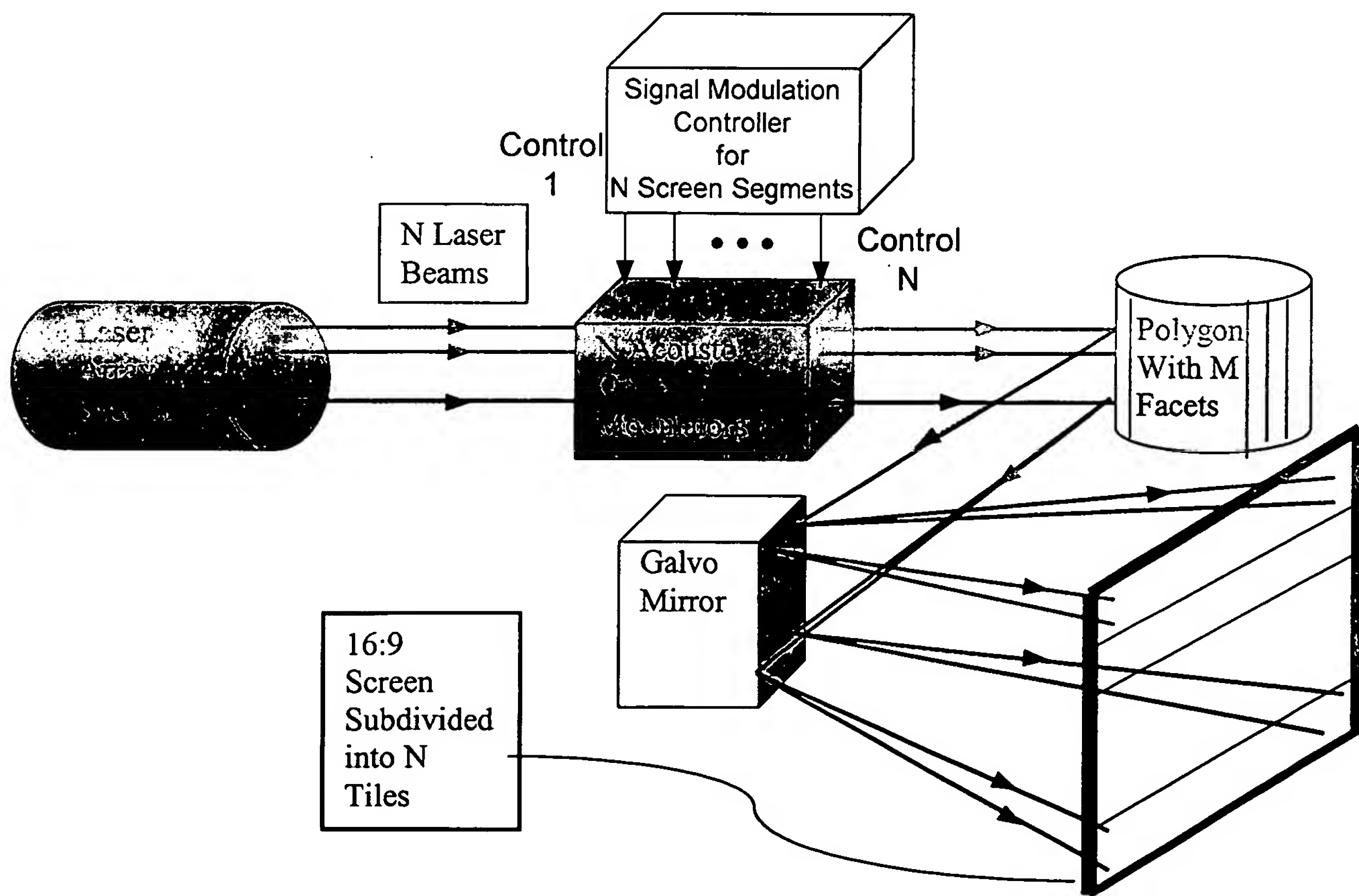


FIG. 18

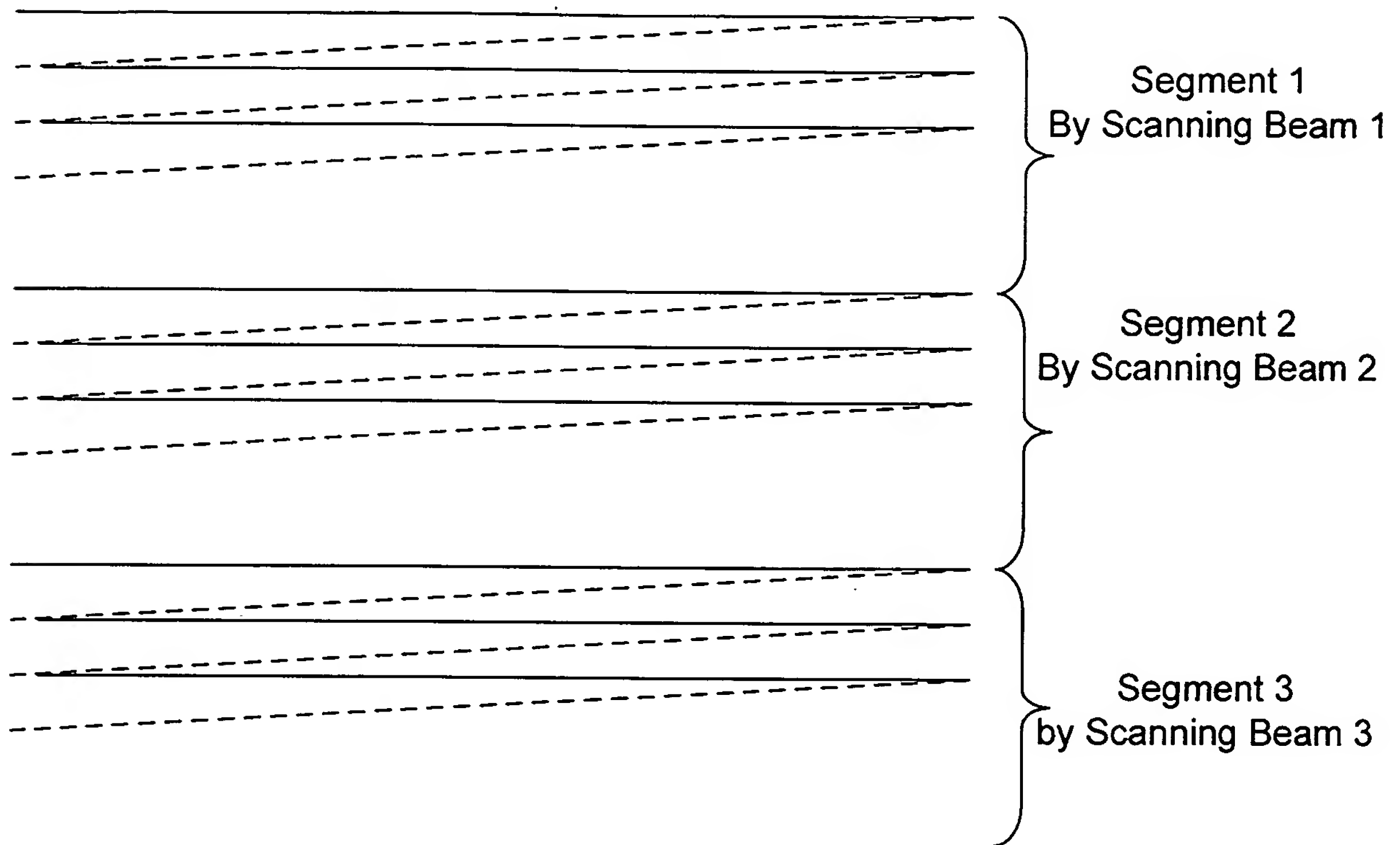


FIG. 19

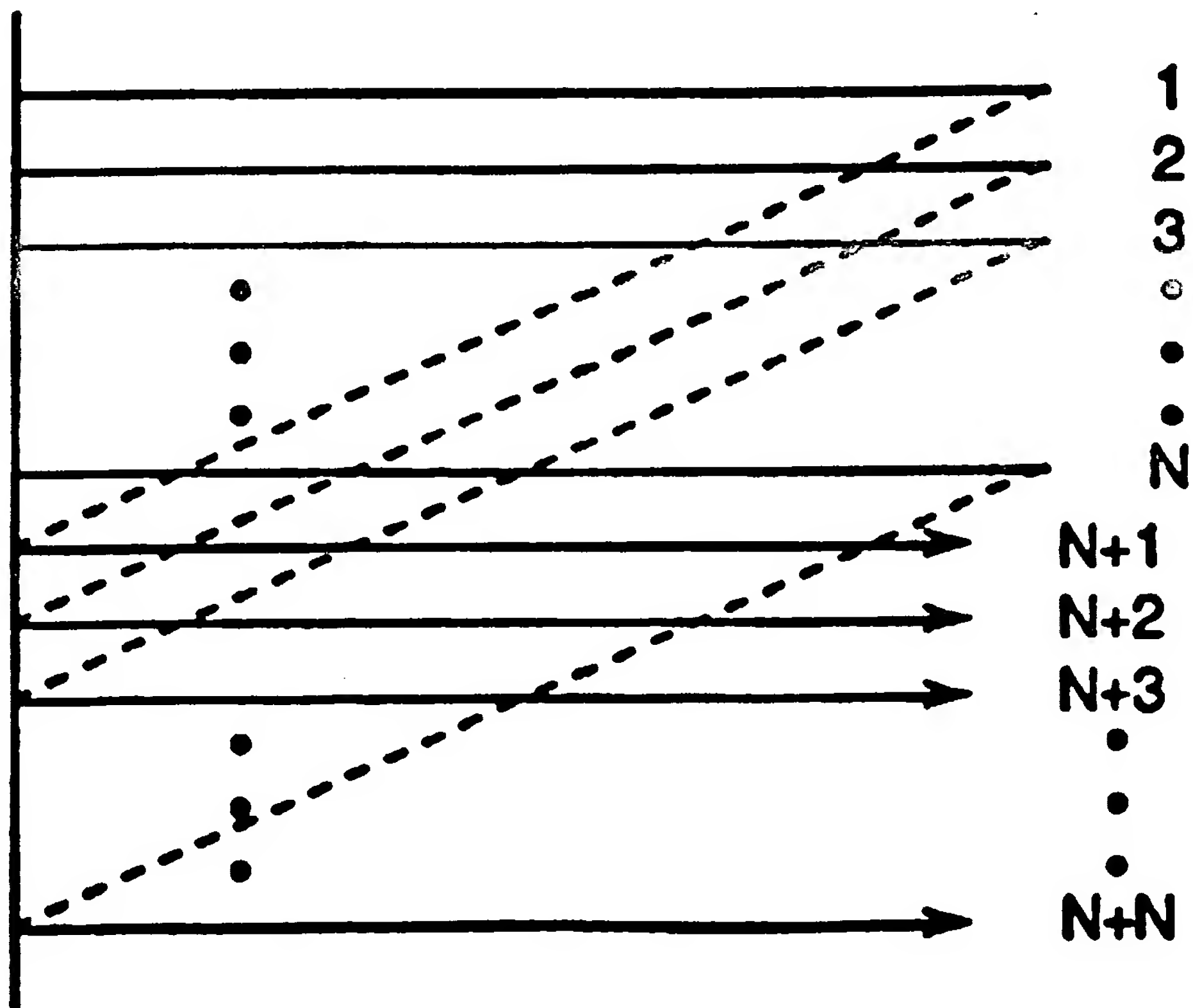


FIG. 20A

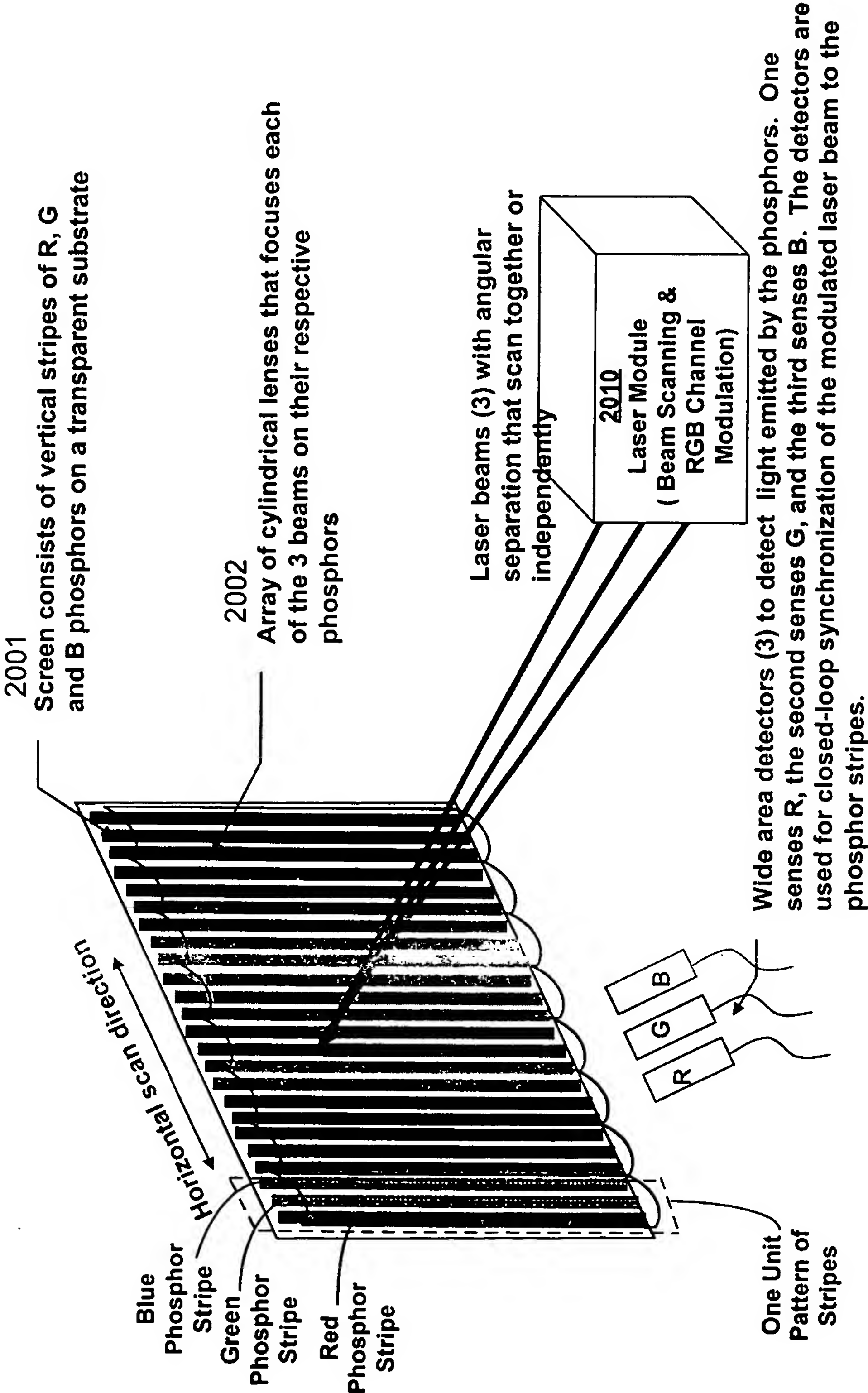
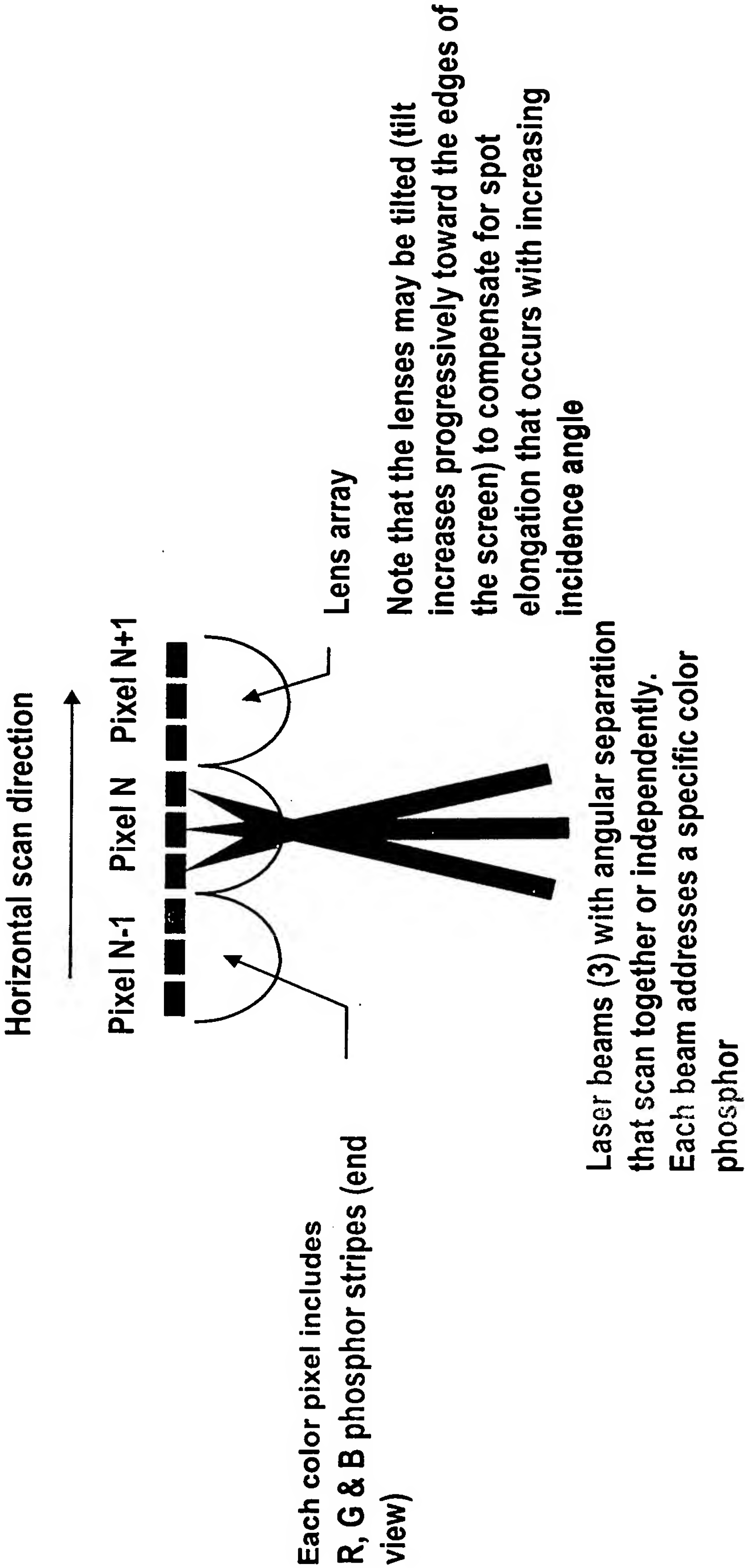


FIG. 20B



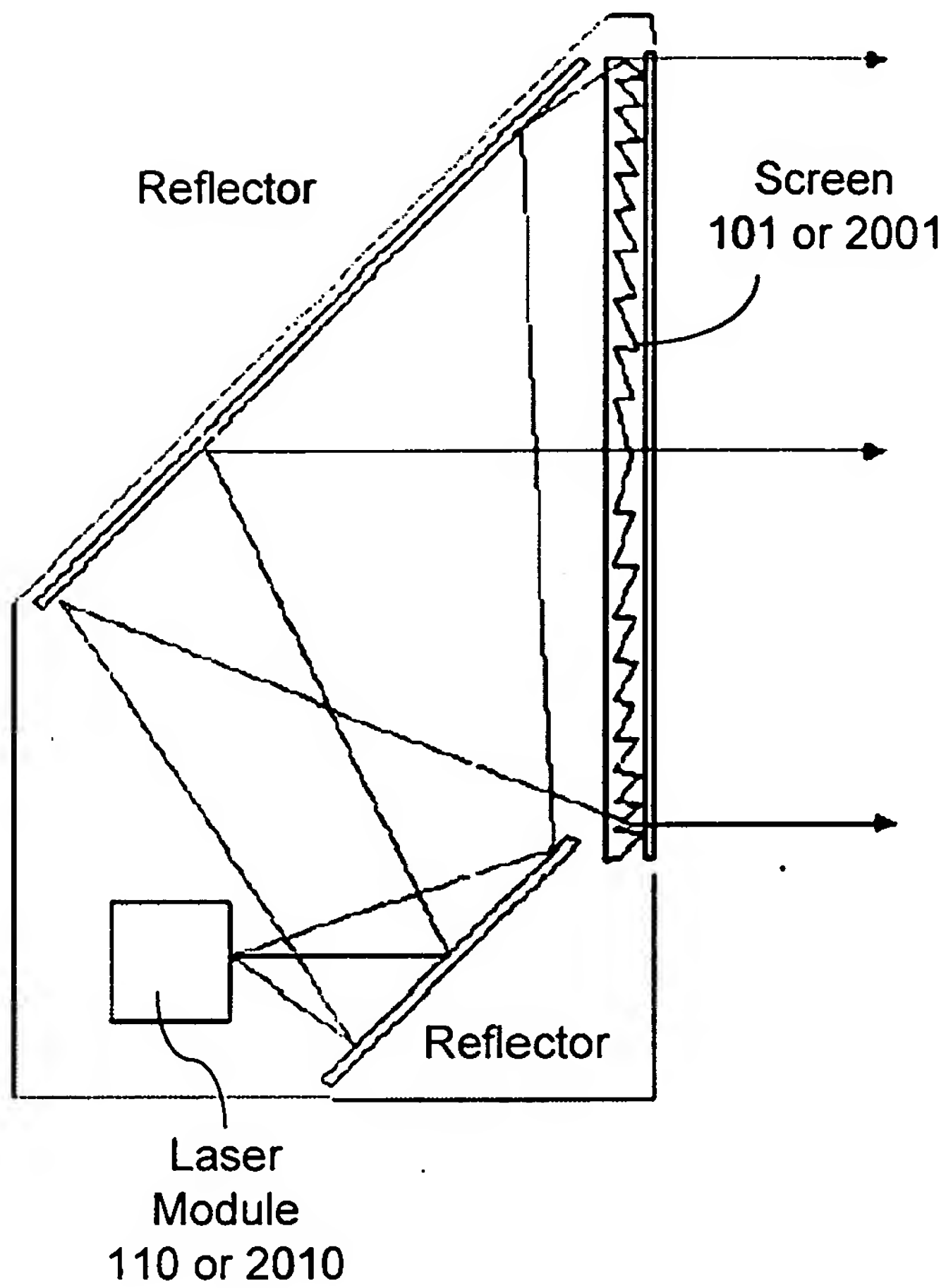


FIG. 21A

FIG. 21B

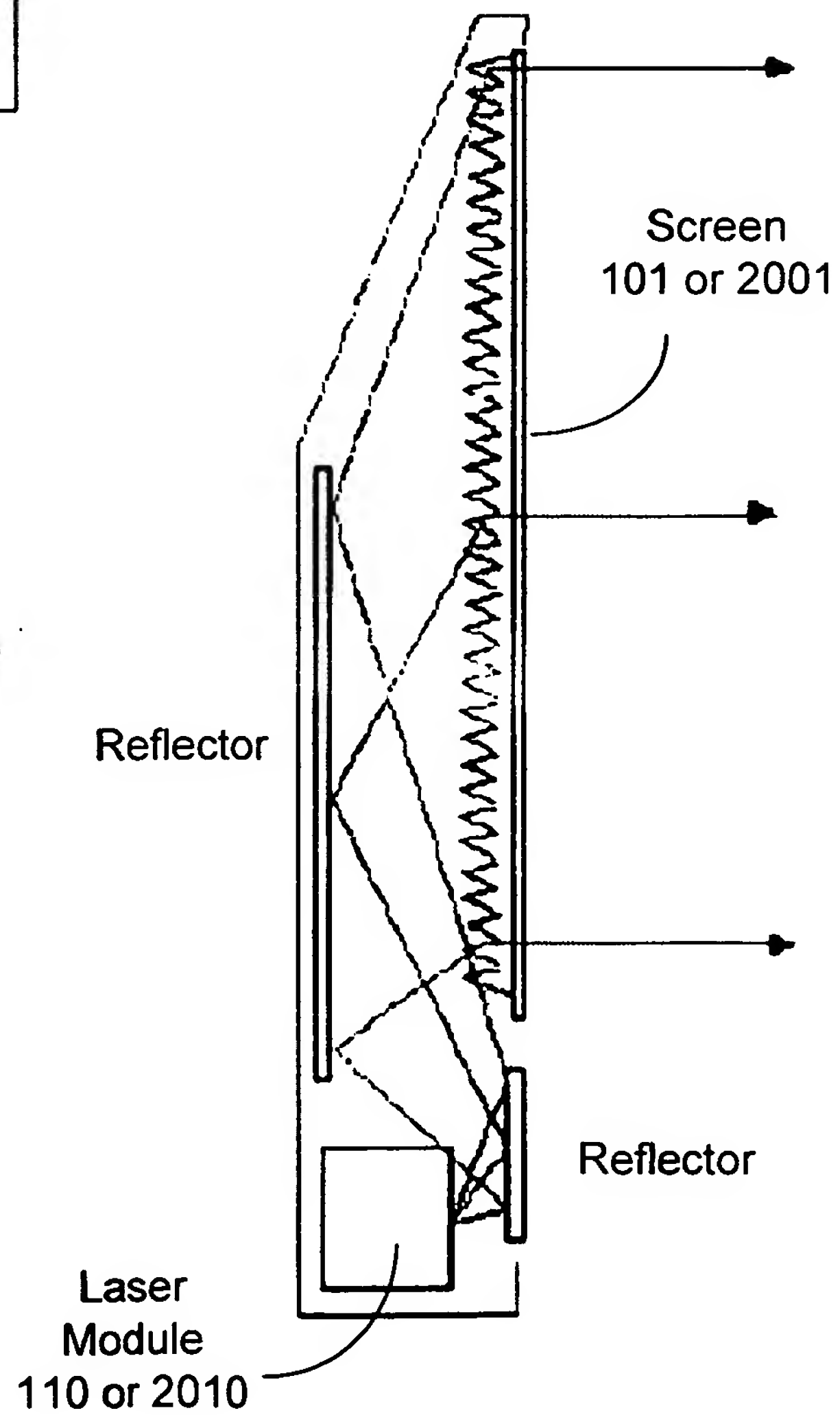


FIG. 22

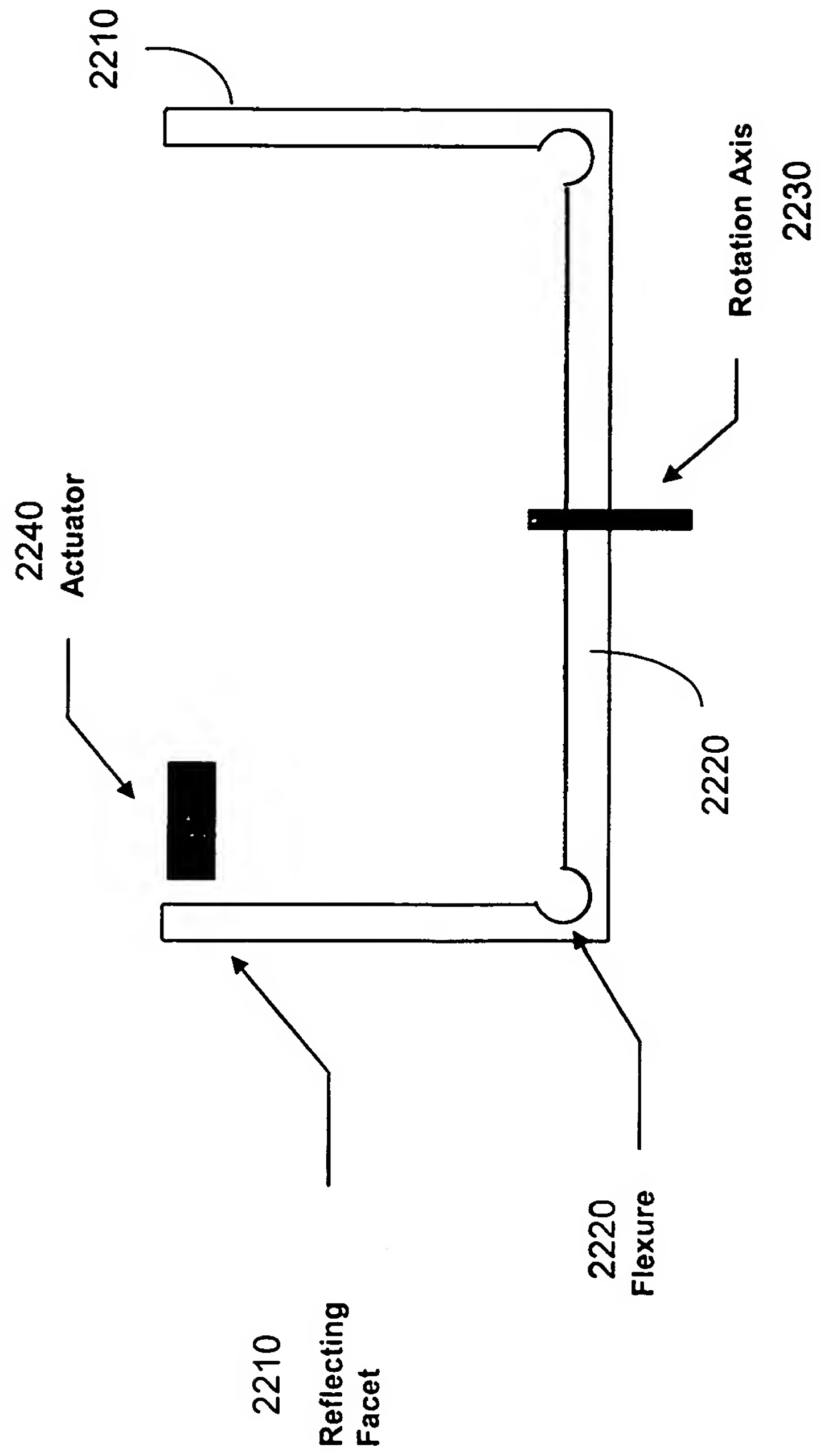


FIG. 23

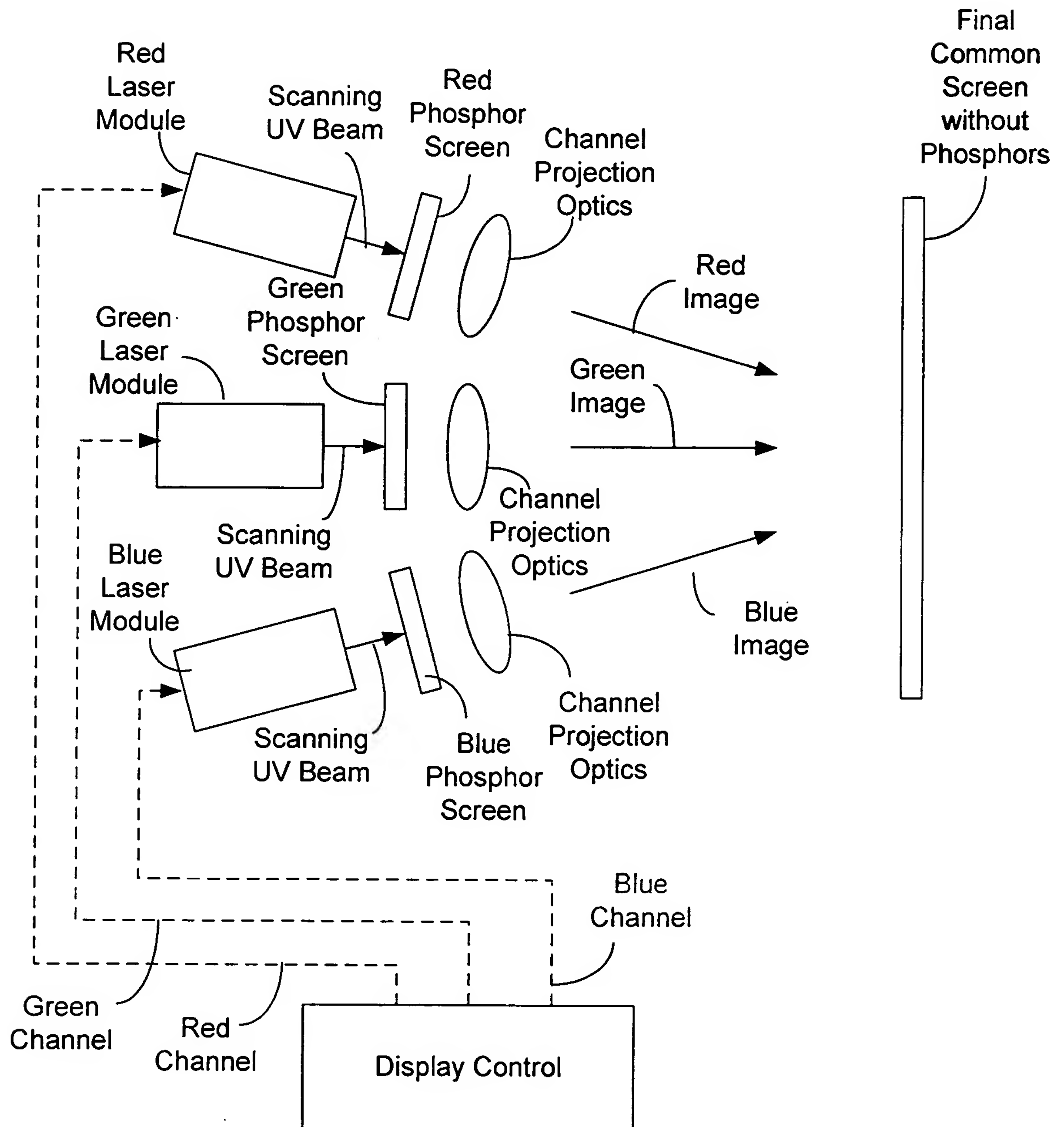


FIG. 24A

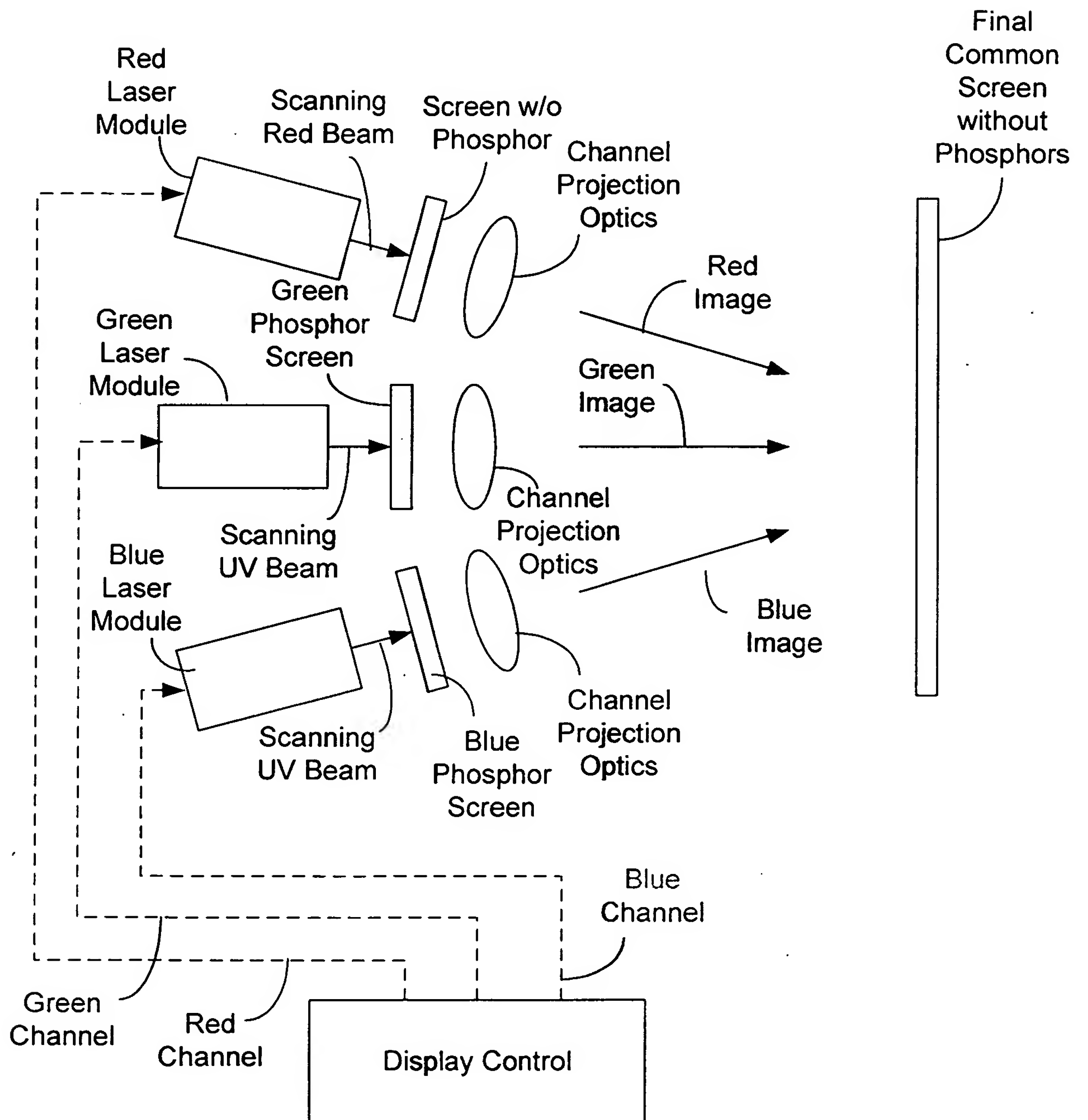


FIG. 24B

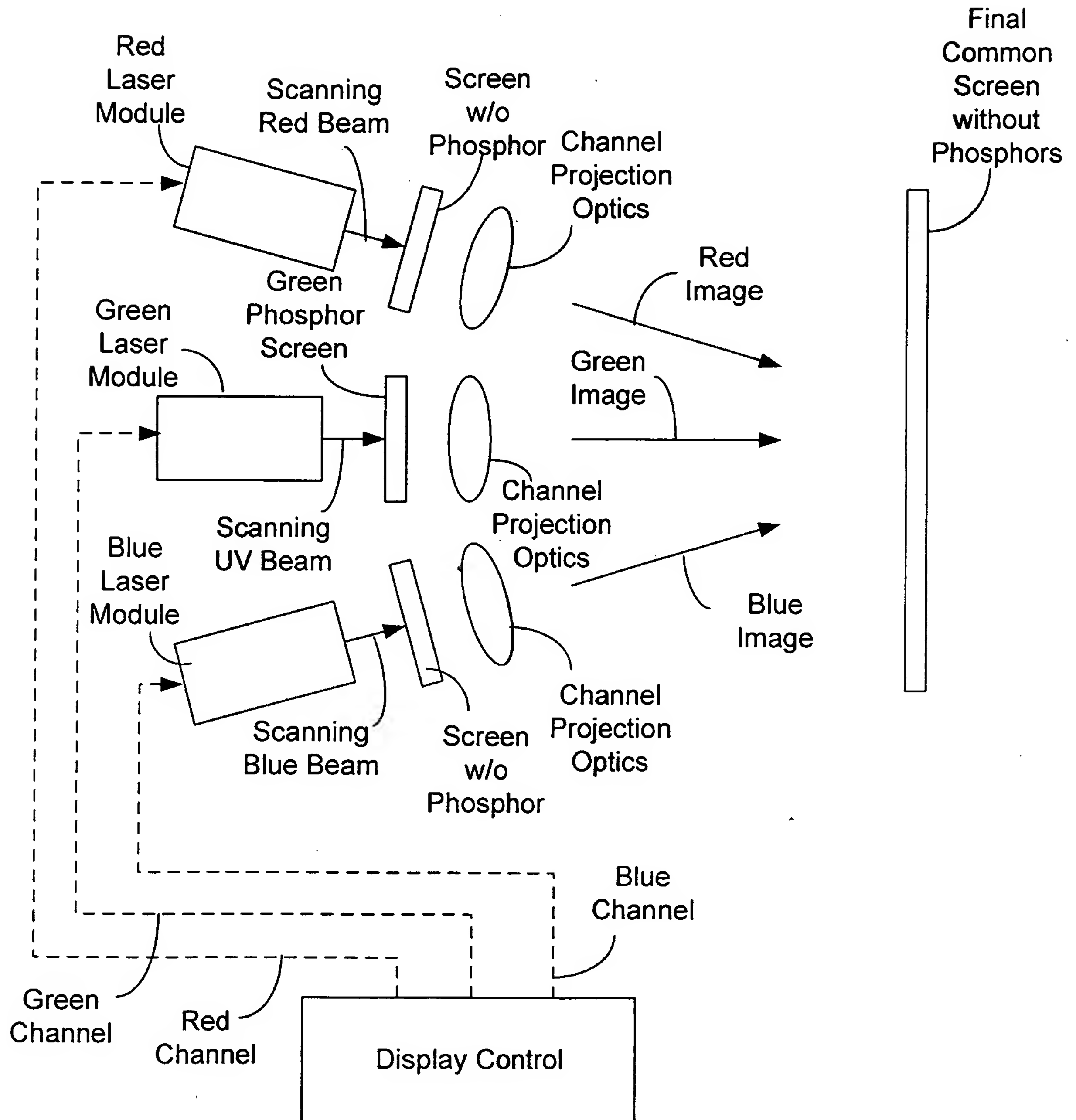


FIG. 25A

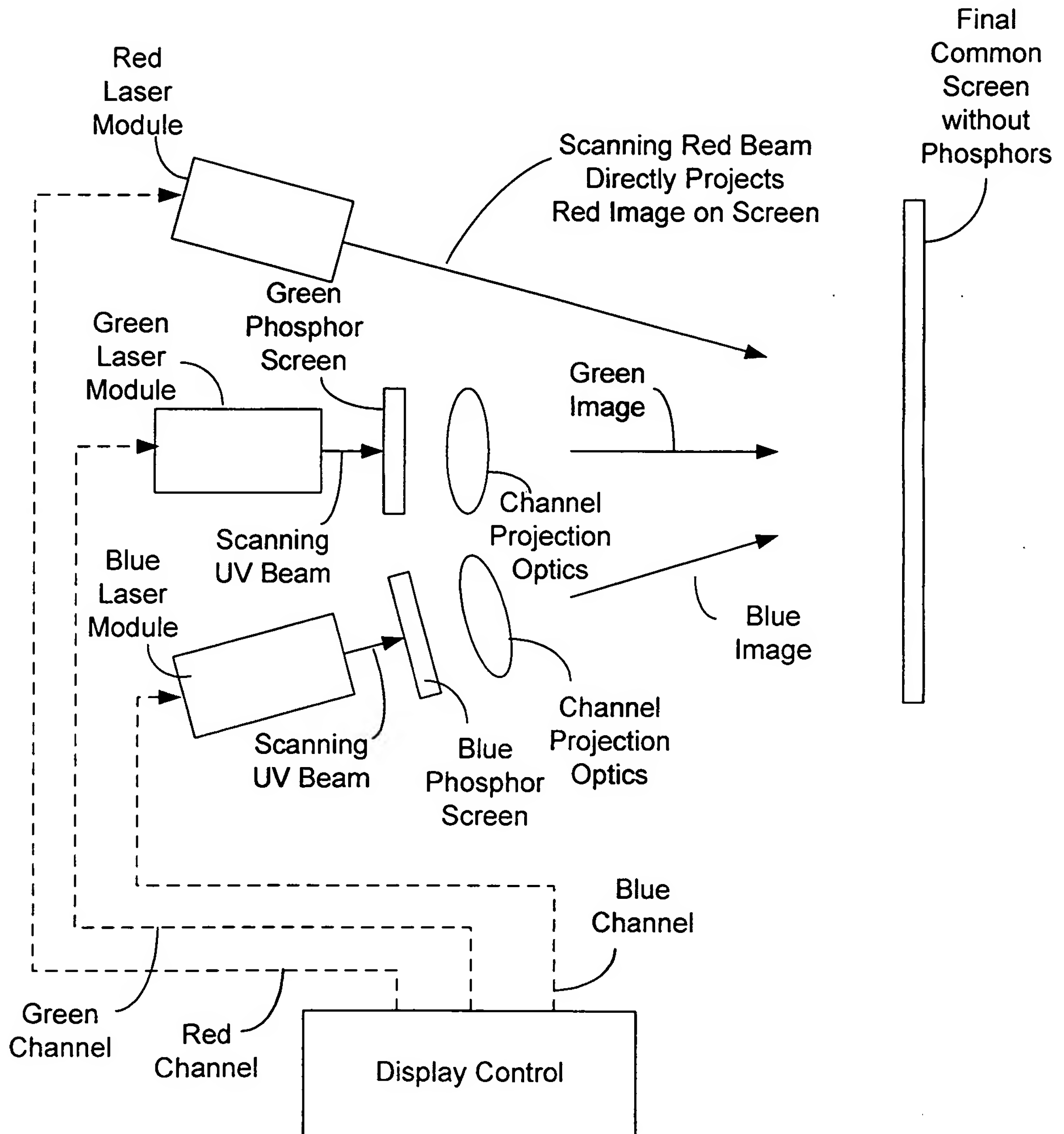
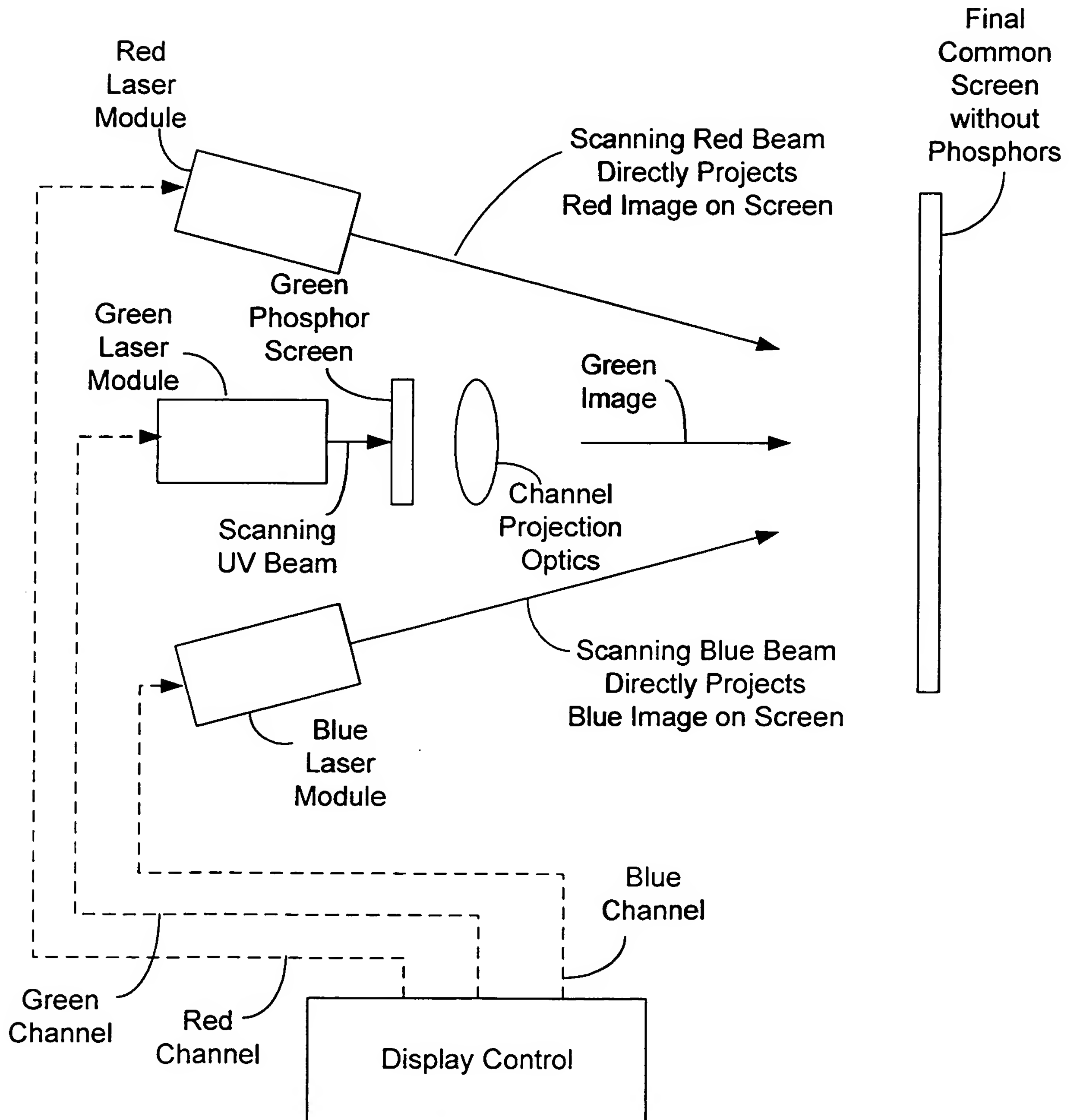
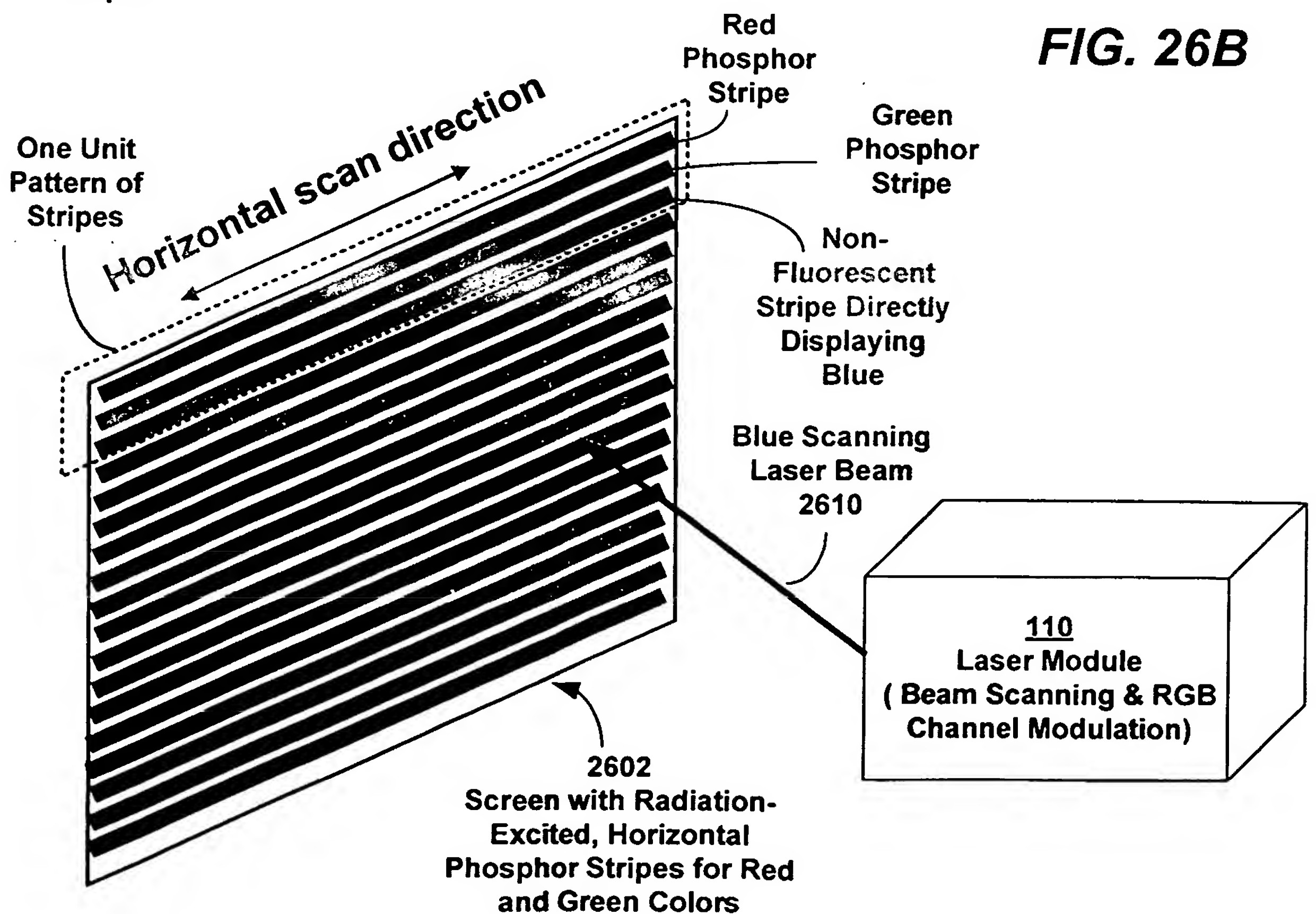
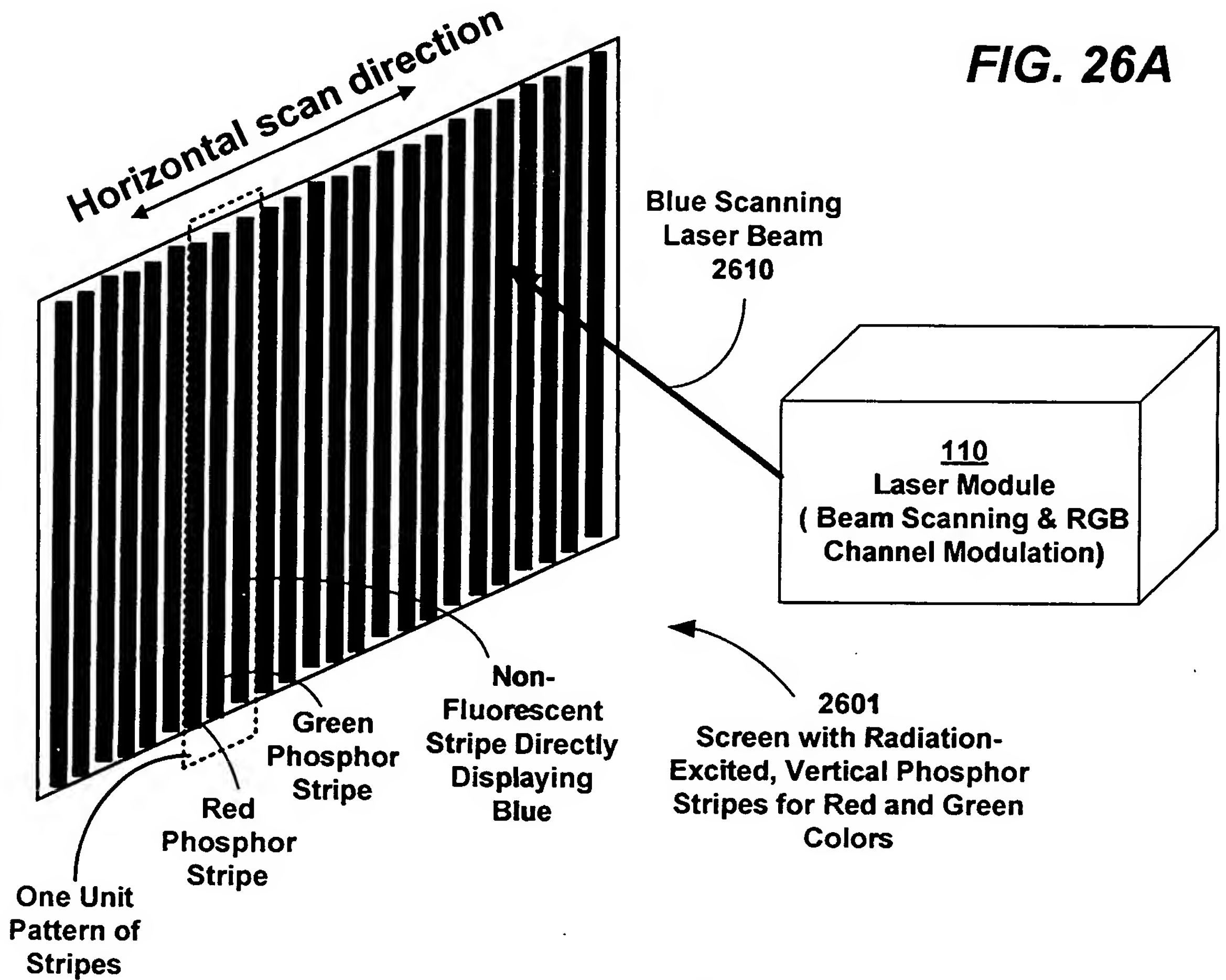


FIG. 25B





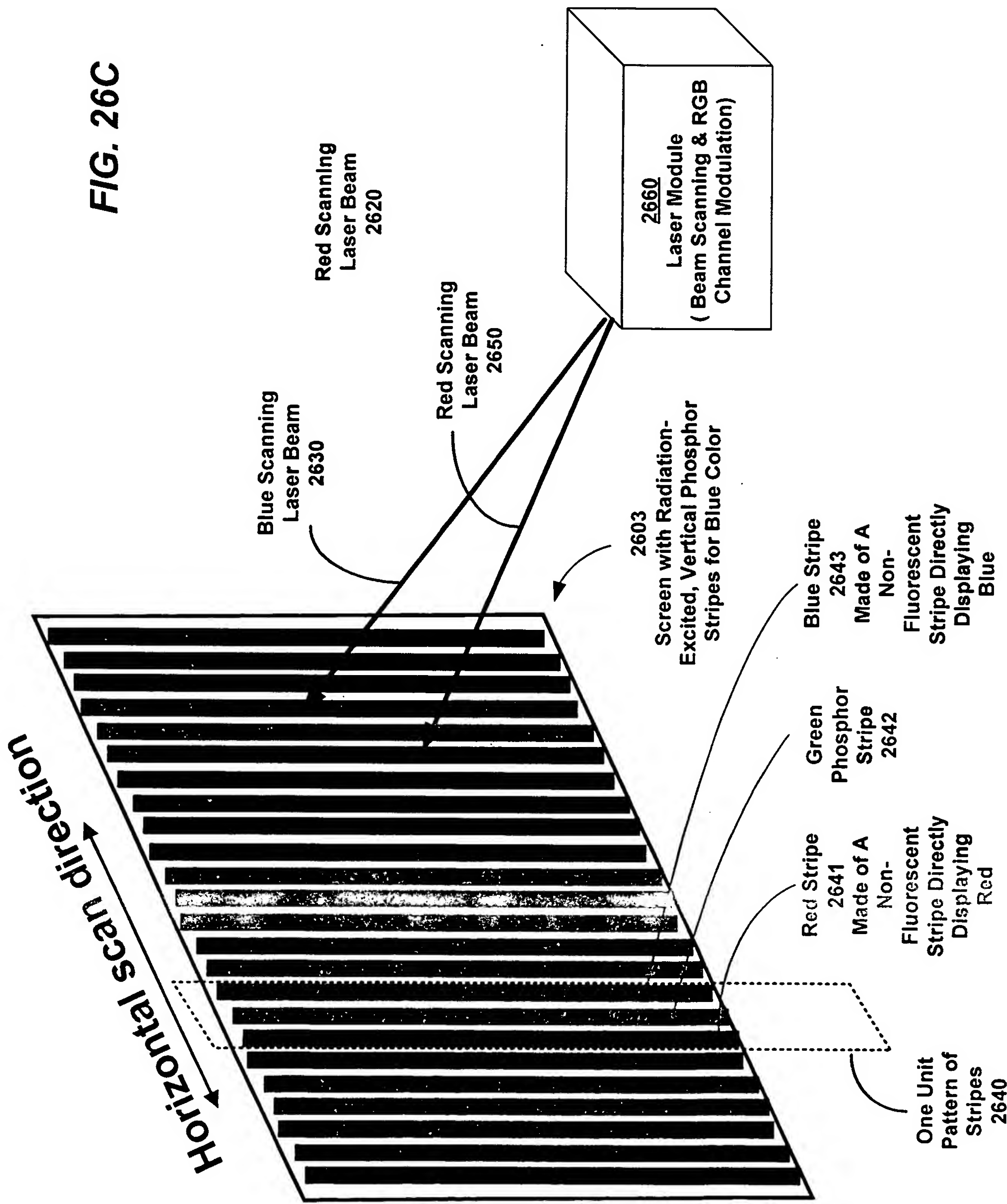


FIG. 27A

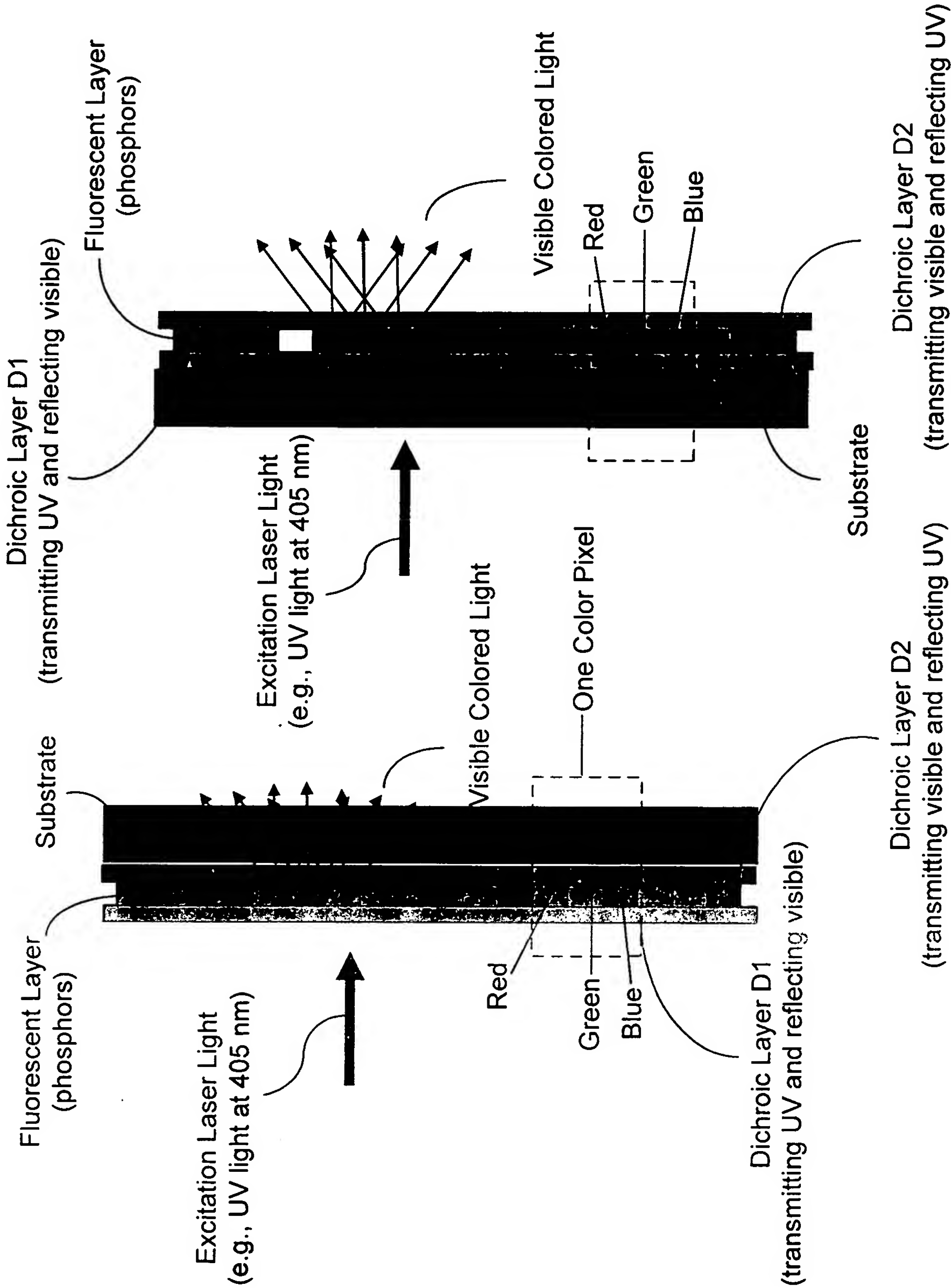


FIG. 27B

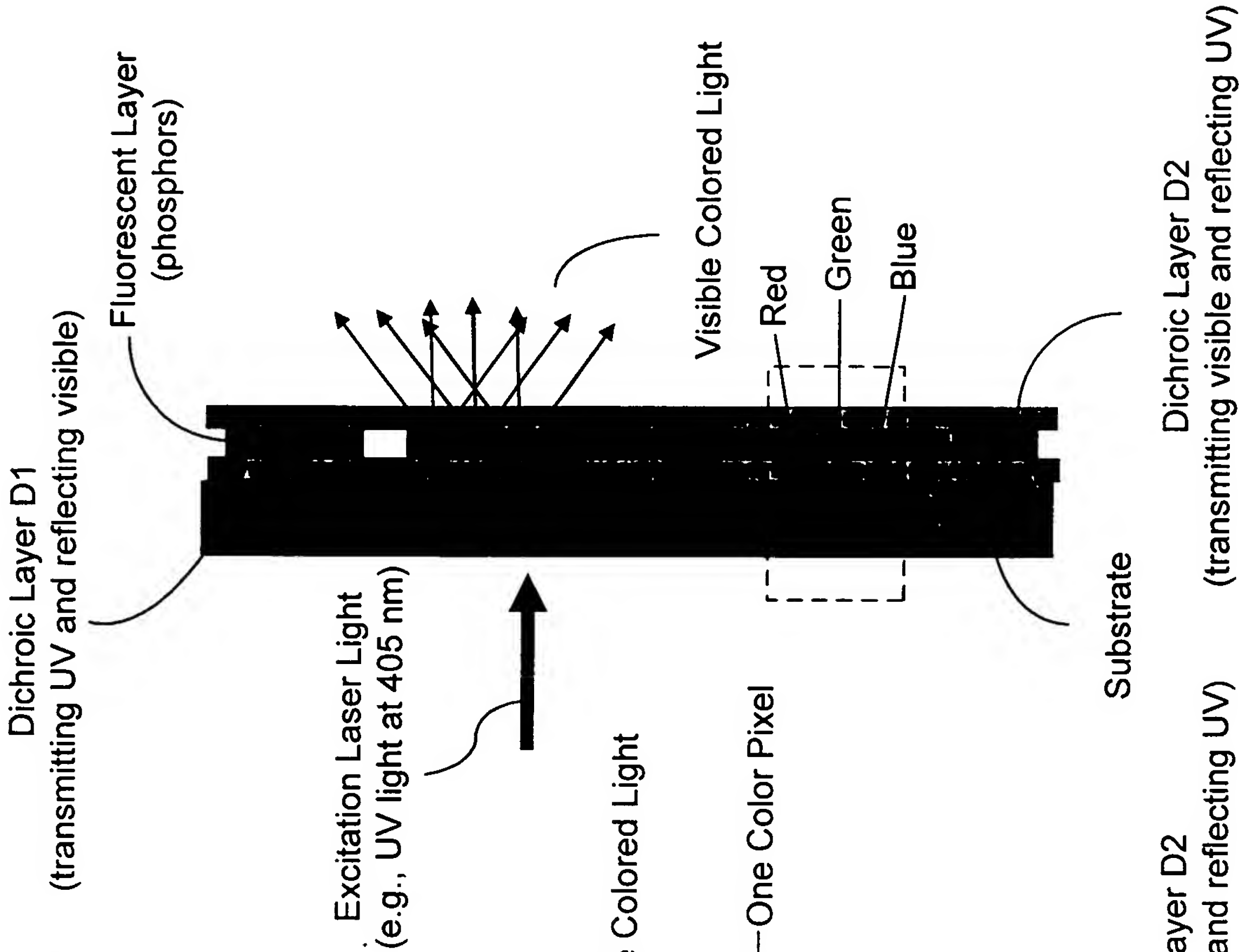
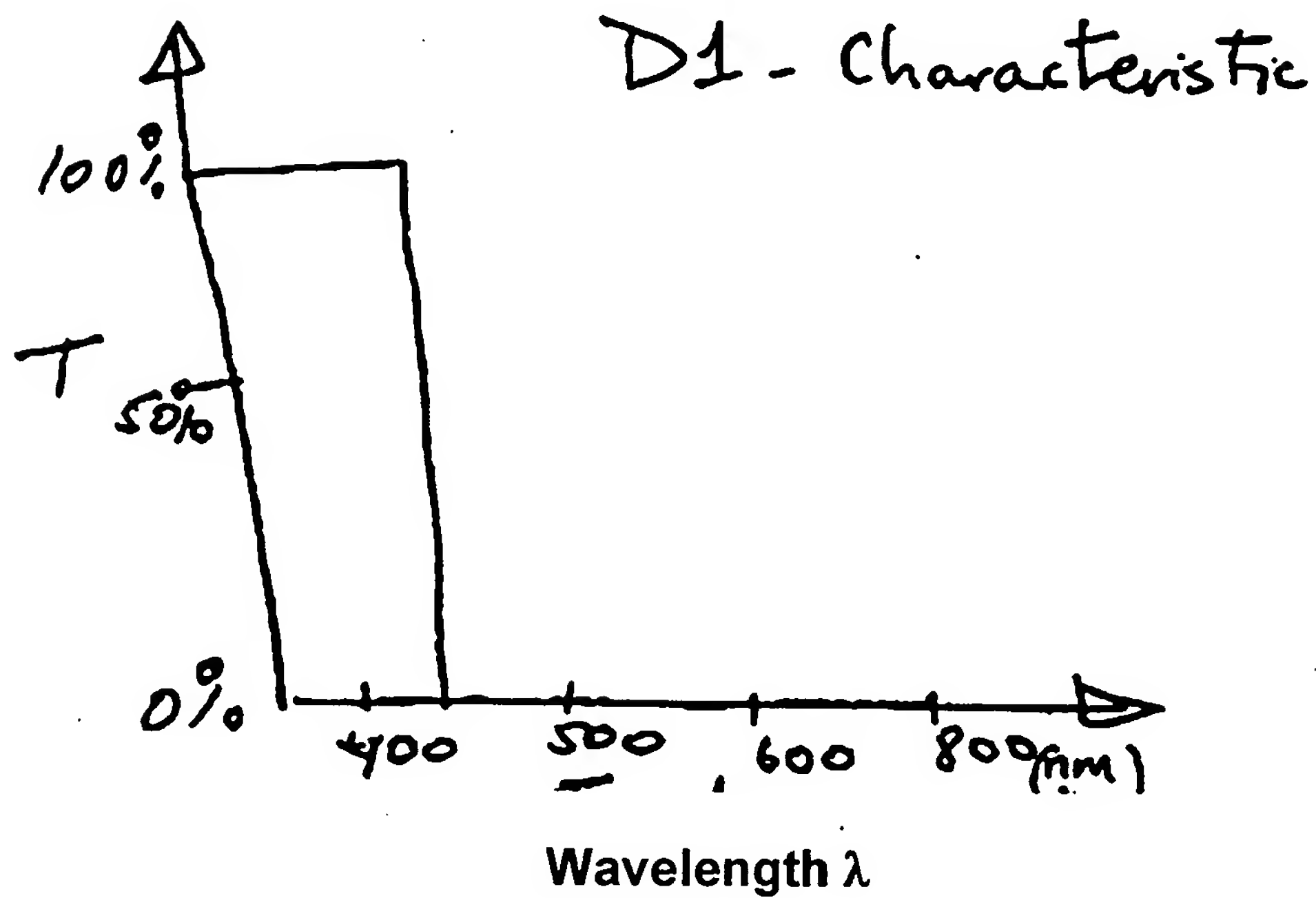
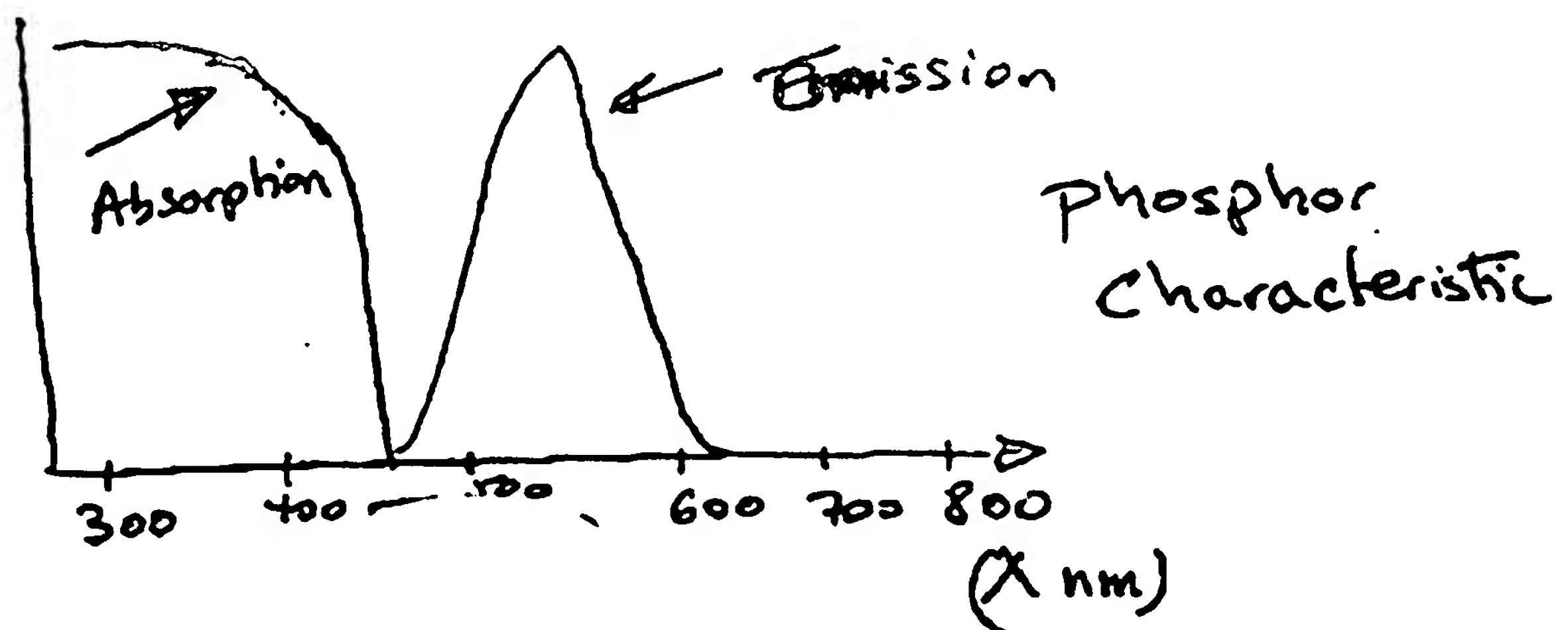


FIG. 27C**FIG. 27D**

D₂ Characteristic

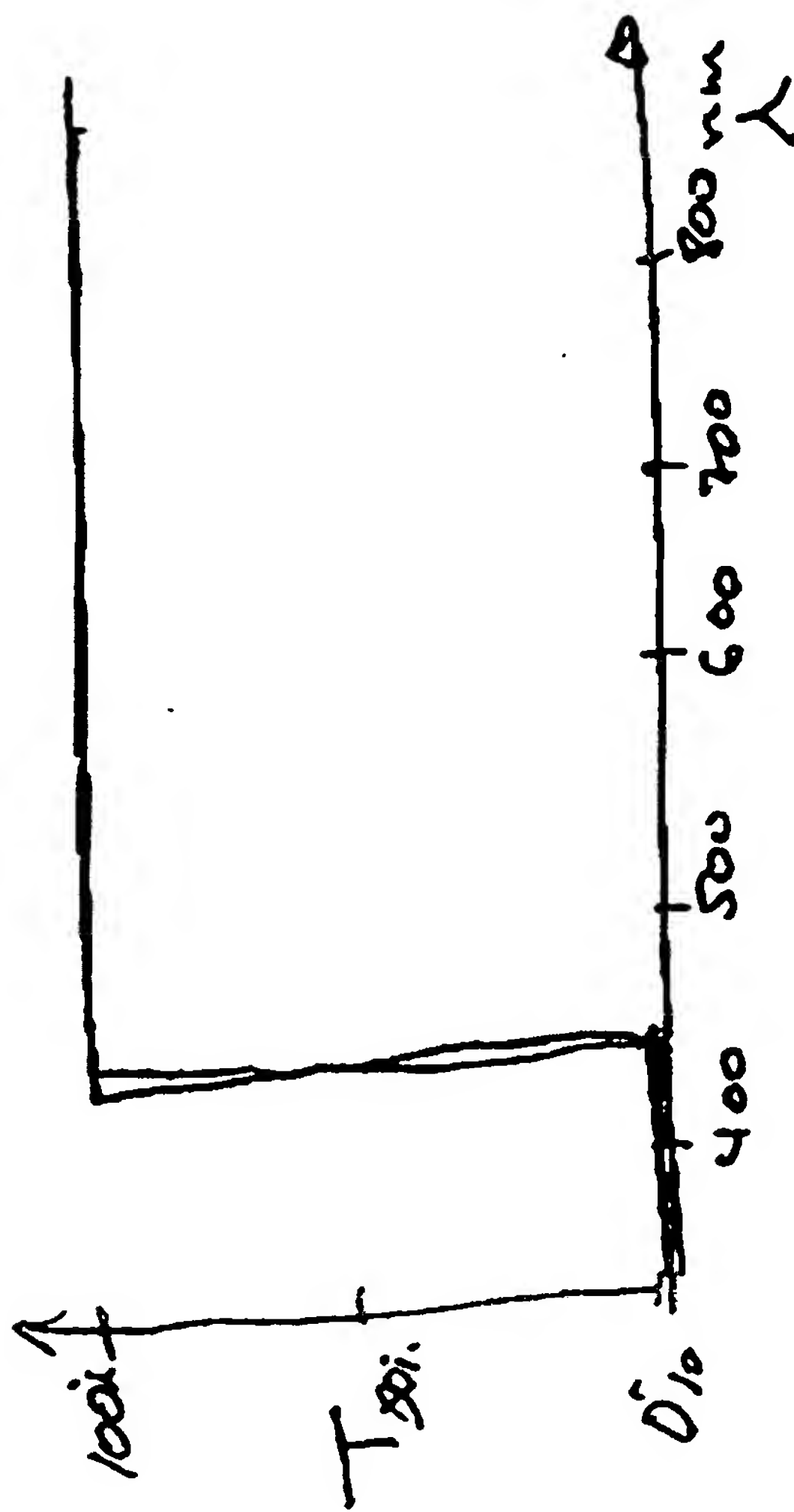


FIG. 27E

FIG. 27F

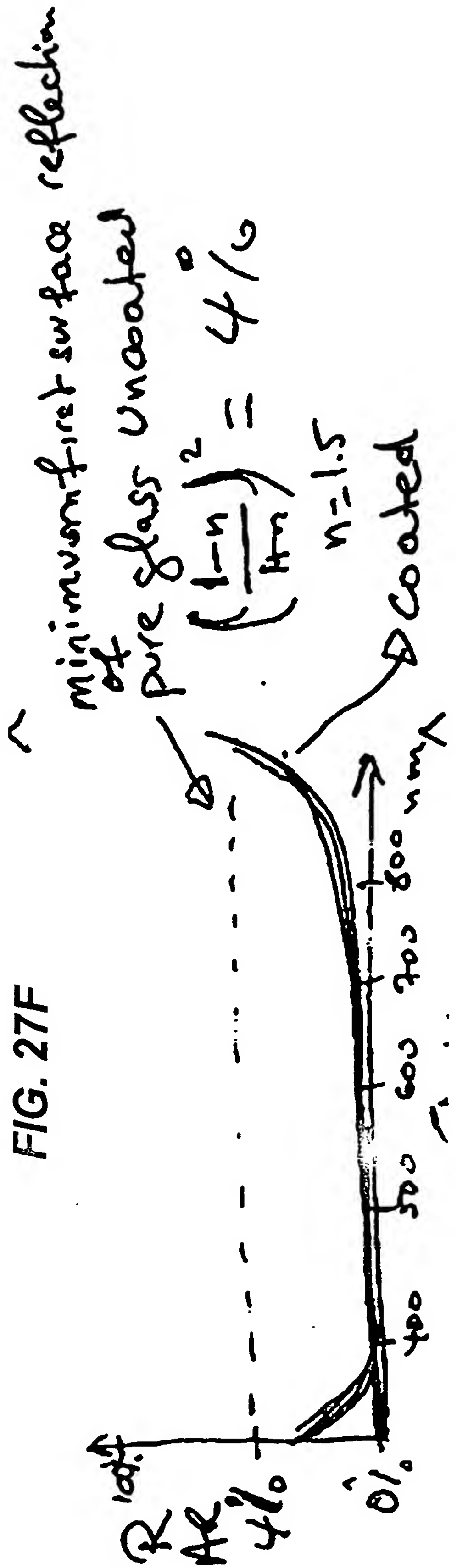


FIG. 28

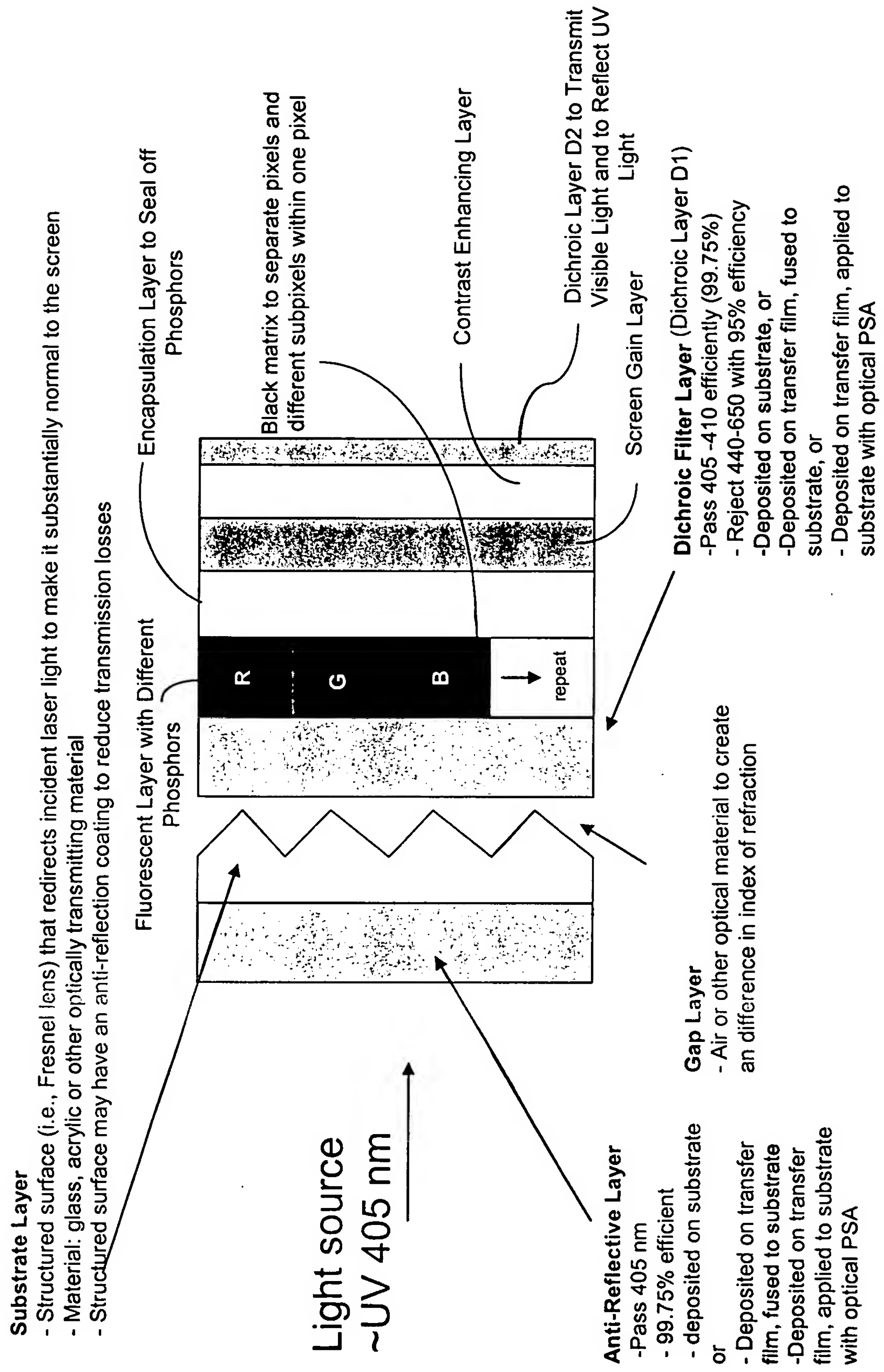


FIG. 29

Fresnel Lens: Functional Illustration

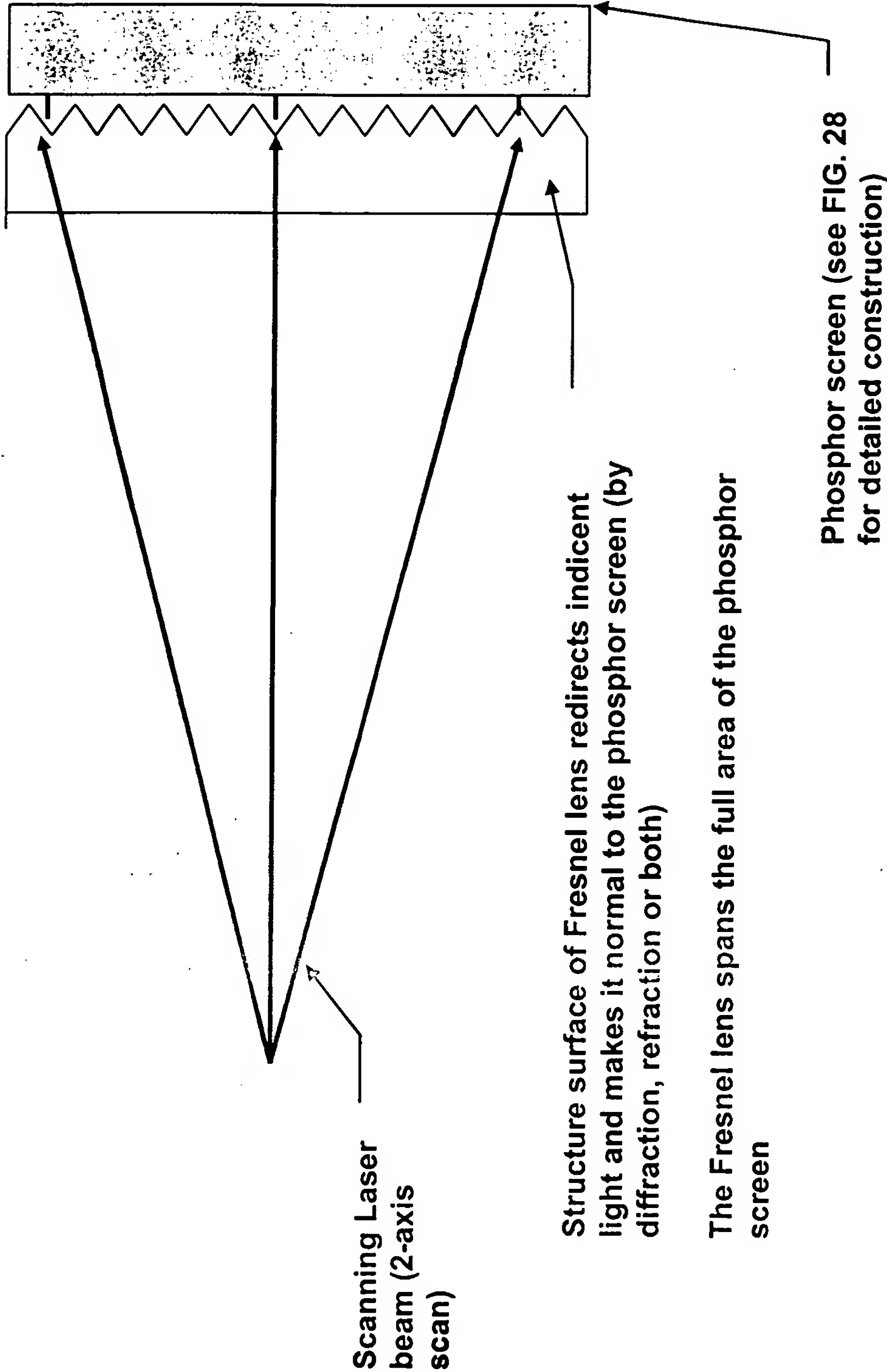


FIG. 30

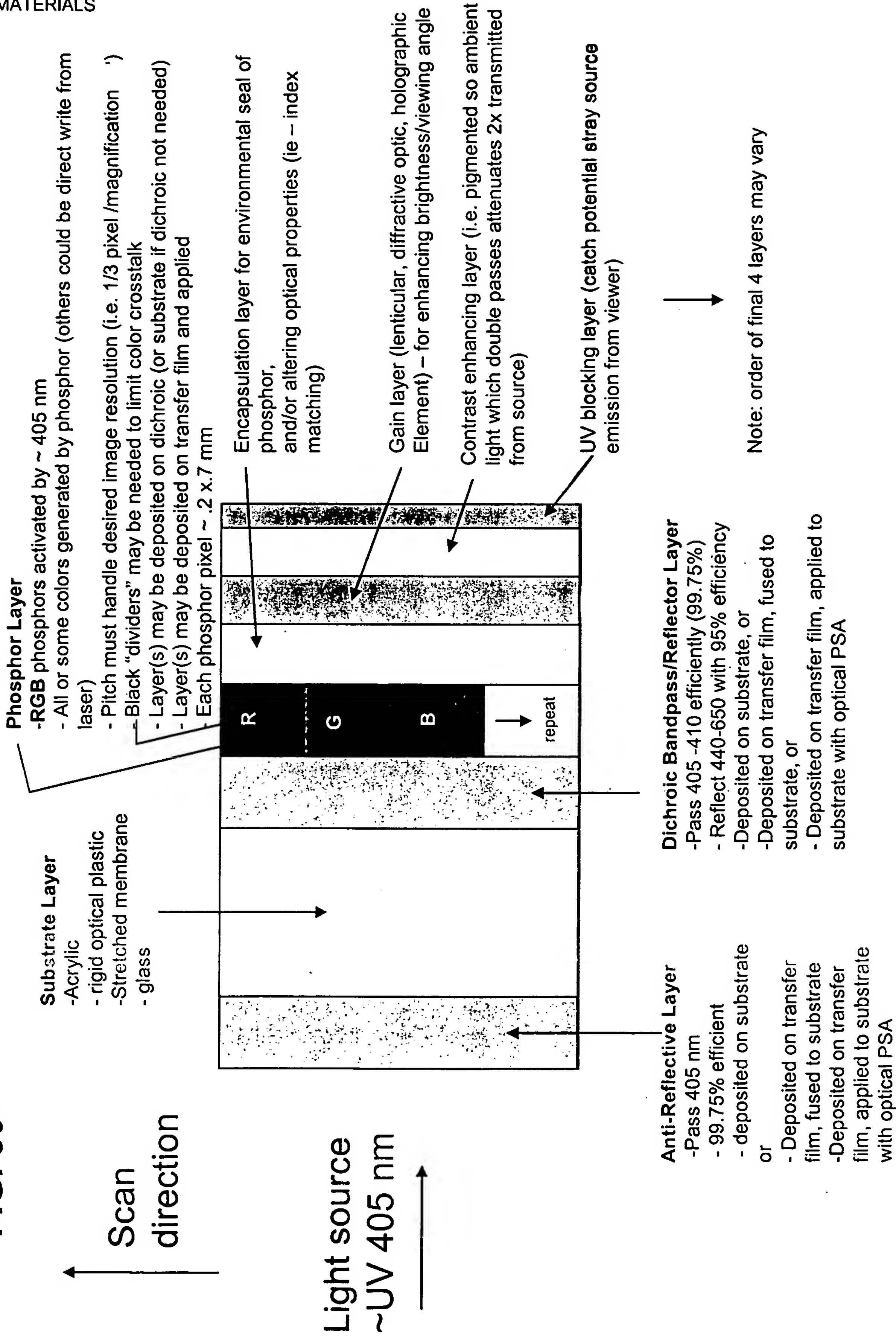


FIG. 31

Light source
~UV 405 nm

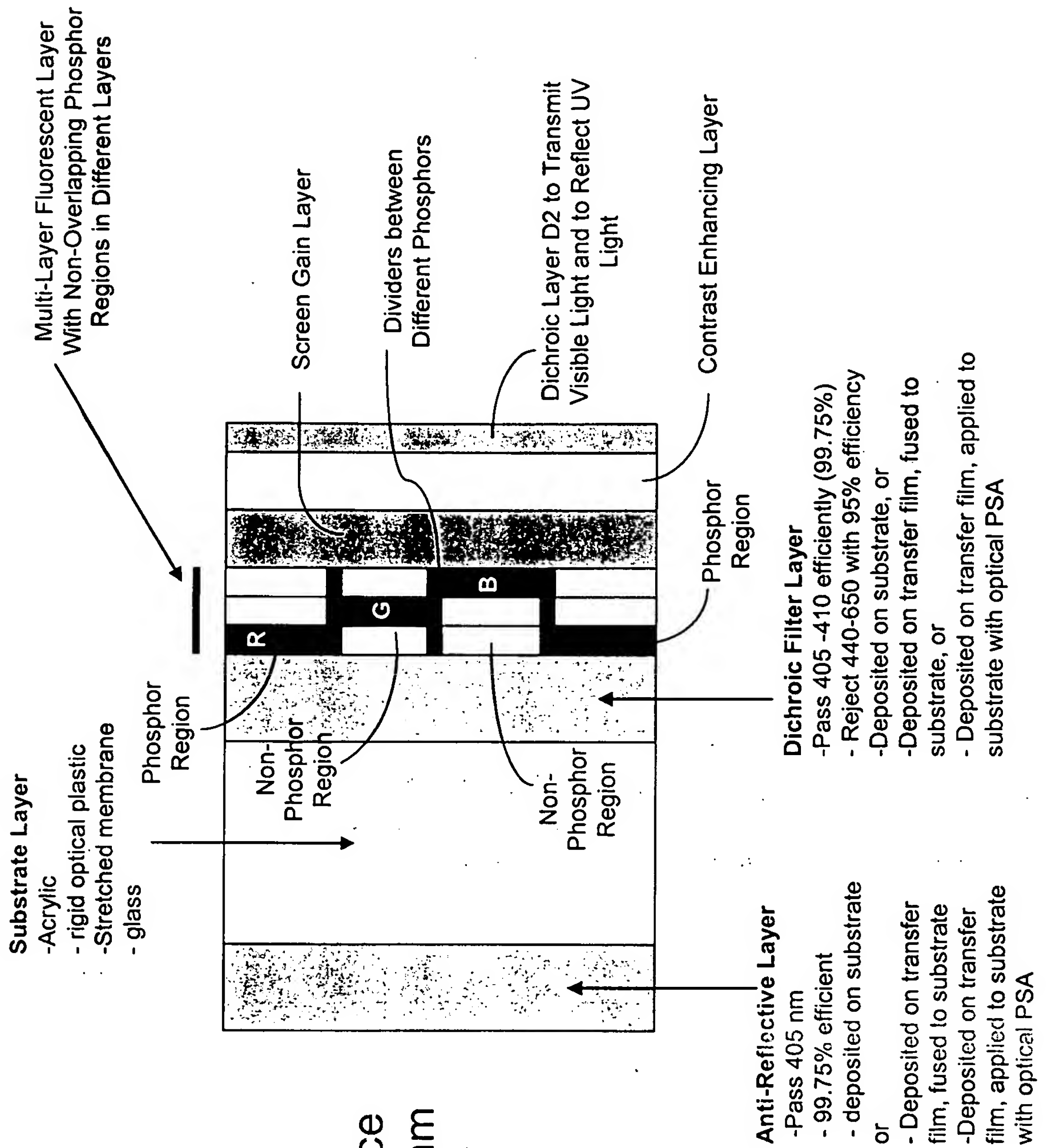
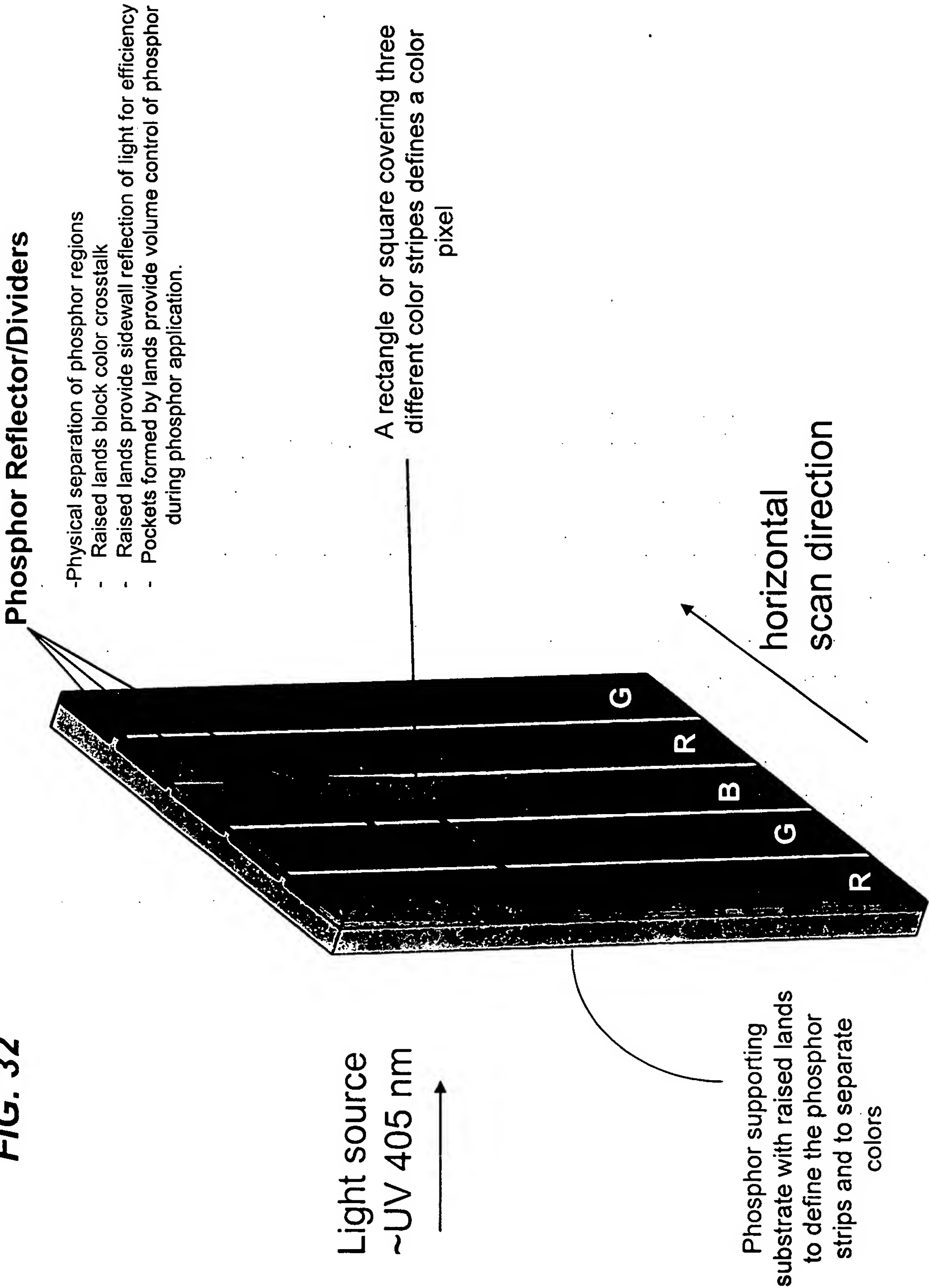
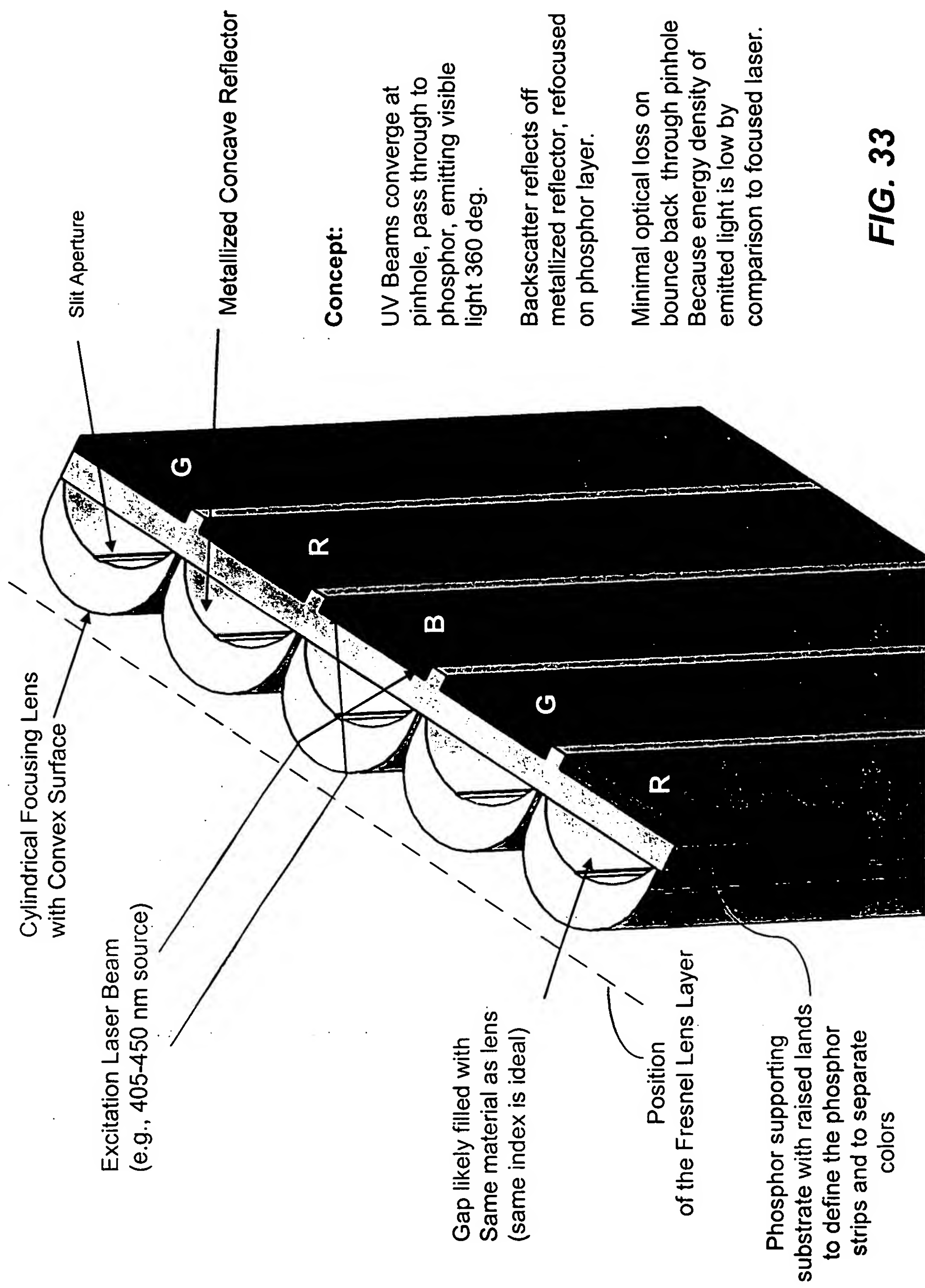


FIG. 32





Concept:

UV Beams converge at pinhole, pass through to phosphor, emitting visible light 360 deg.

Backscatter reflects off metallized reflector, refocused on phosphor layer.

Minimal optical loss on bounce back through pinhole
Because energy density of emitted light is low by comparison to focused laser.

FIG. 33

FIG. 34A

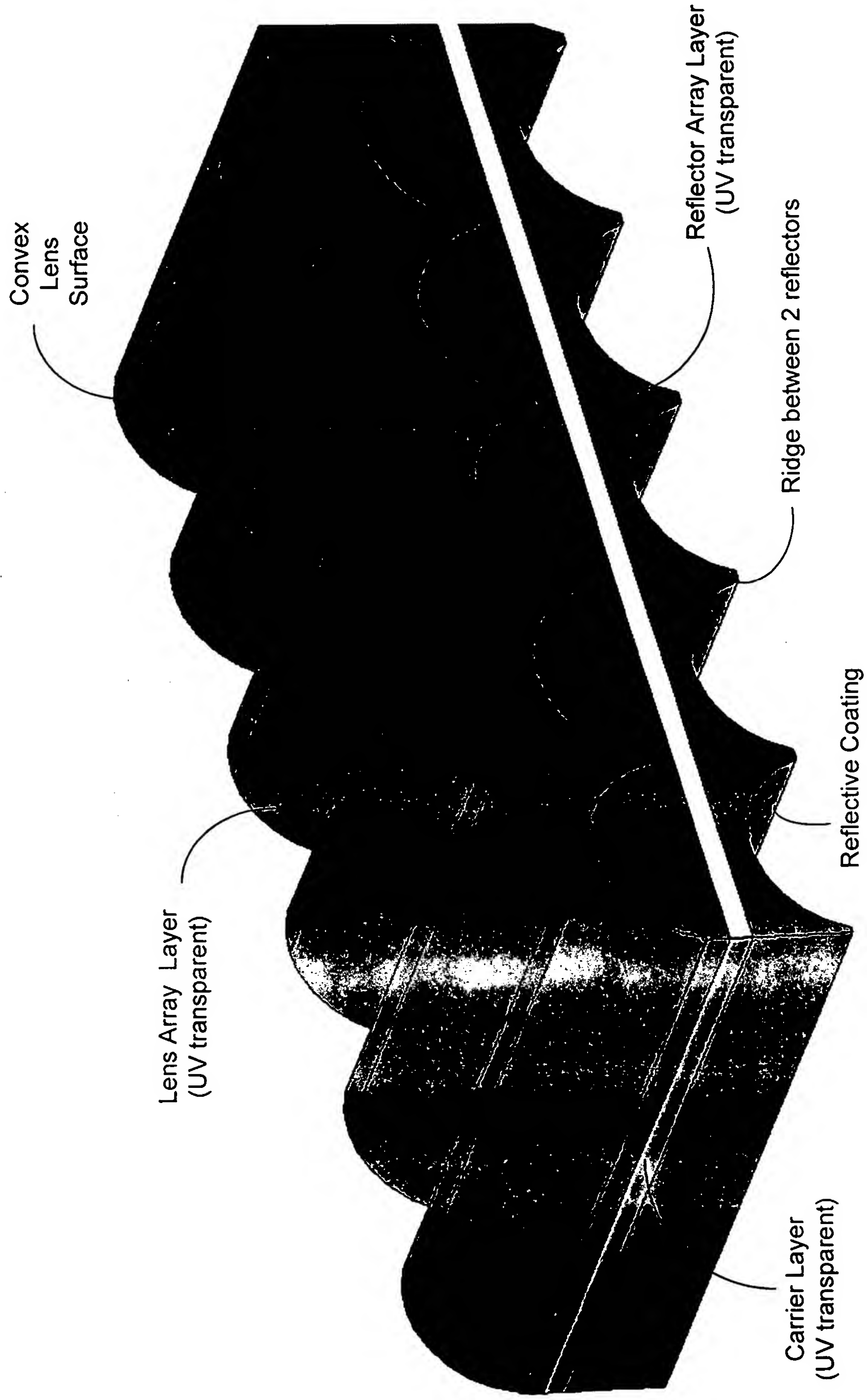


FIG. 34B

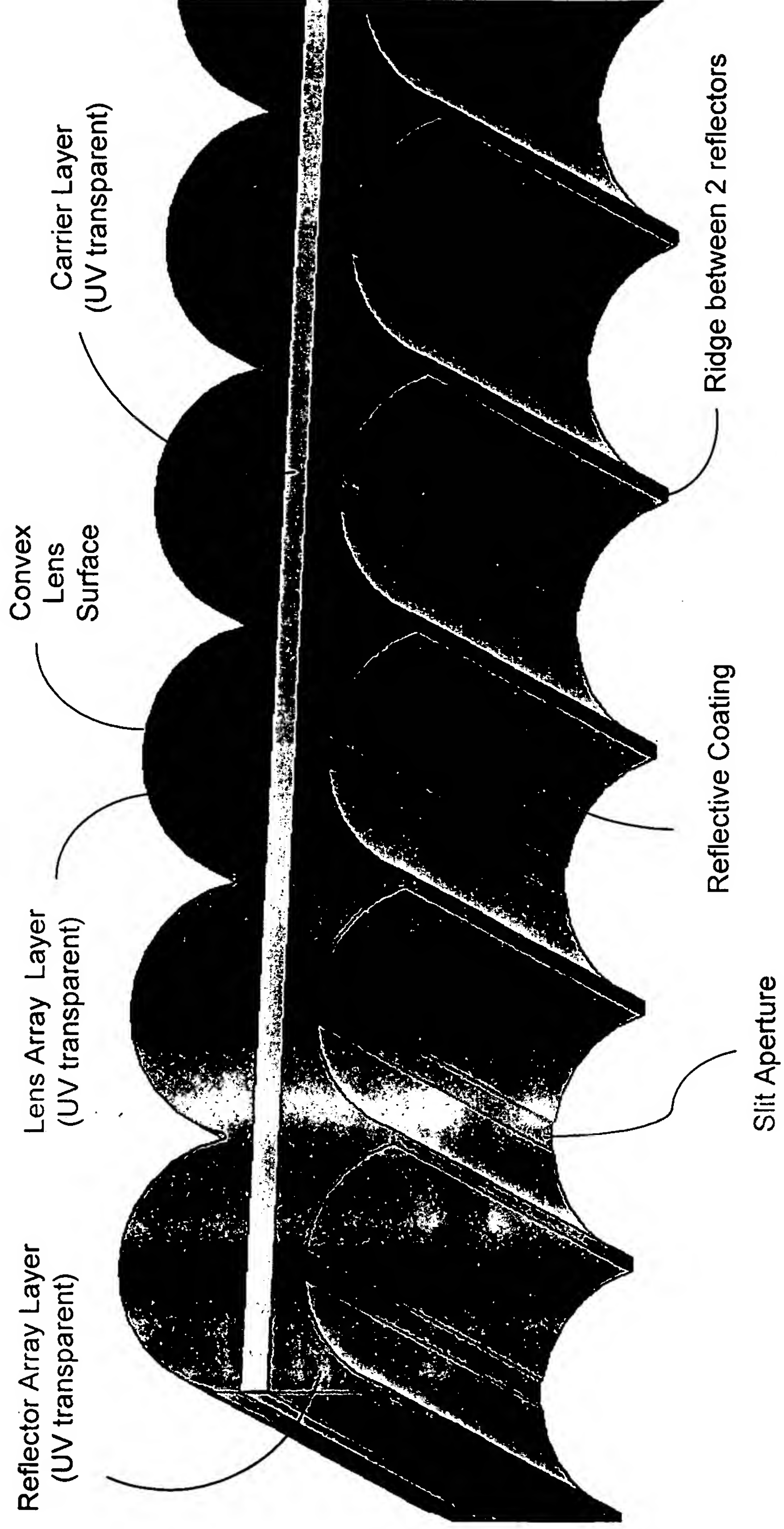


FIG. 35A

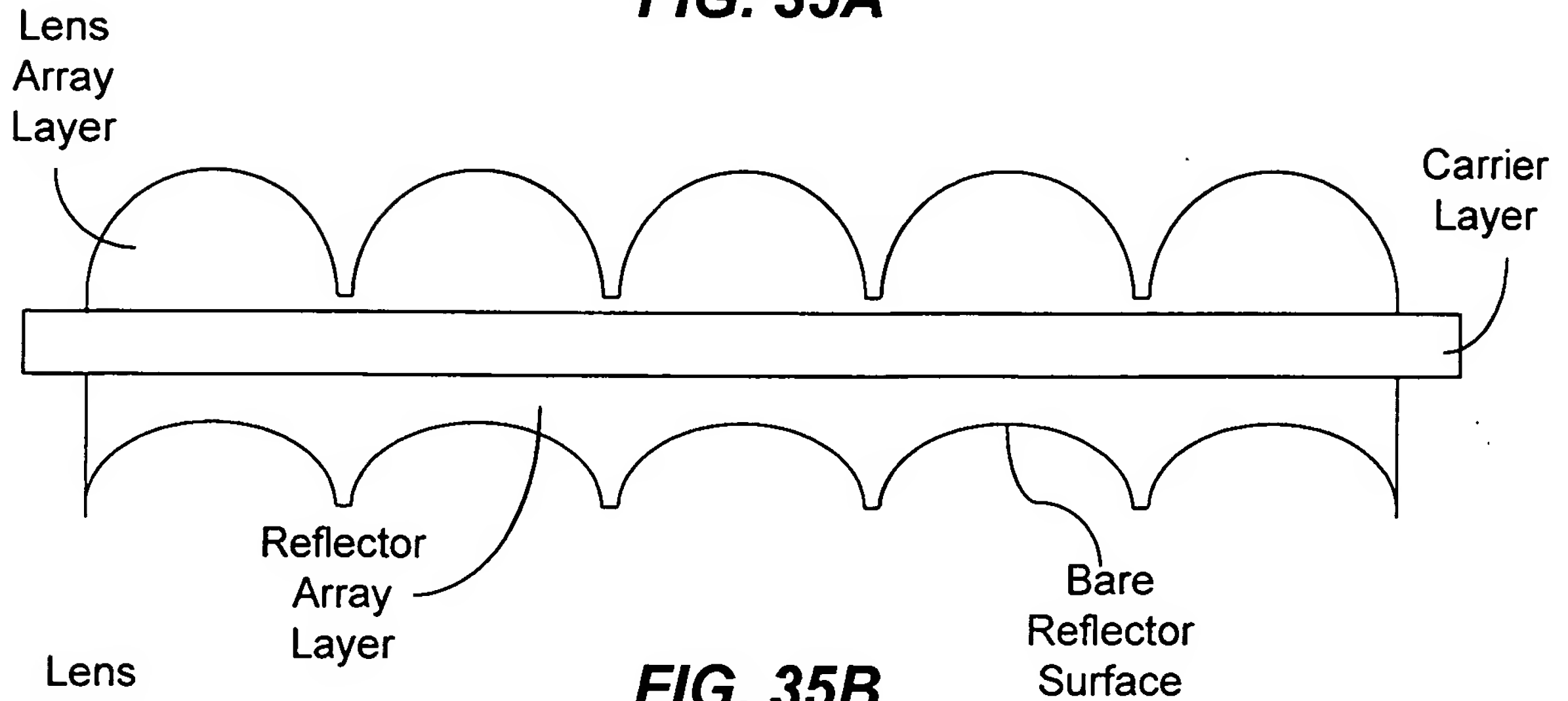


FIG. 35B

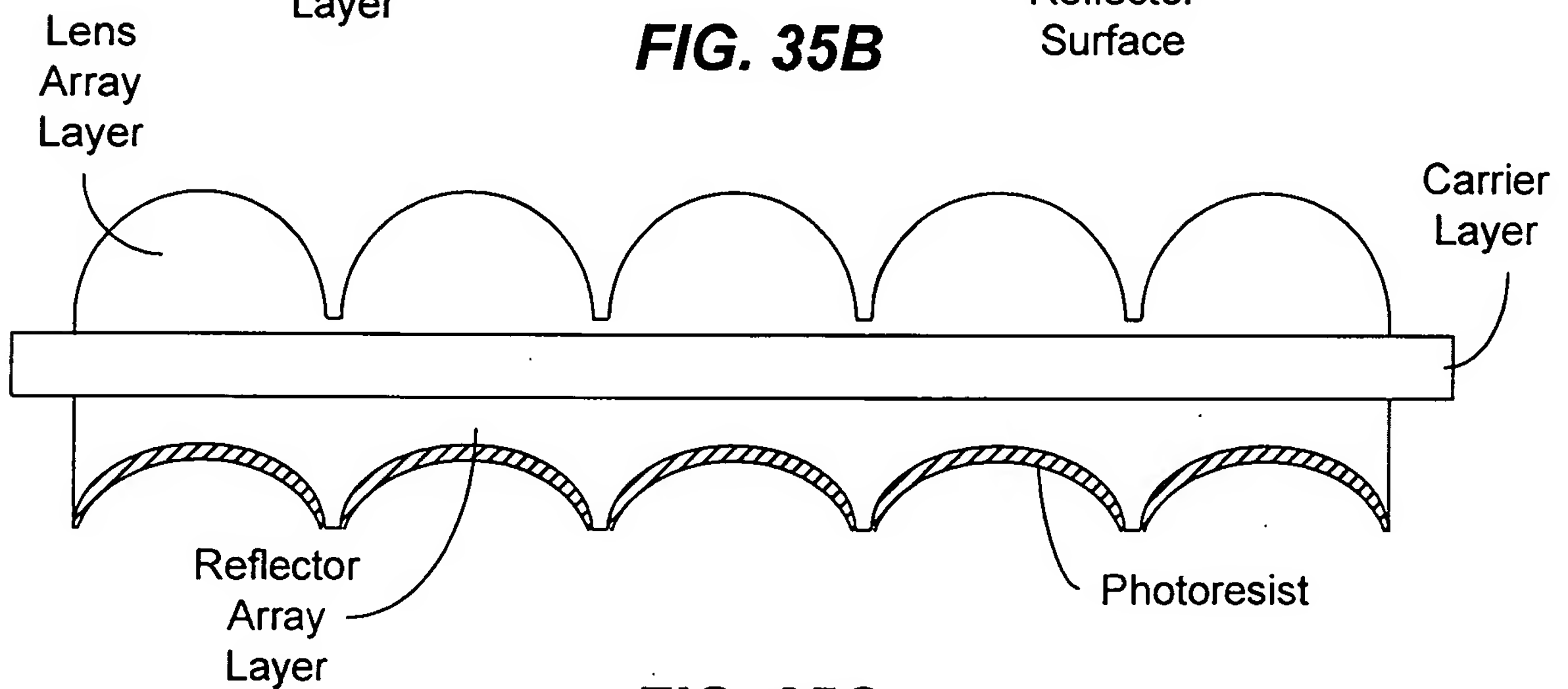


FIG. 35C

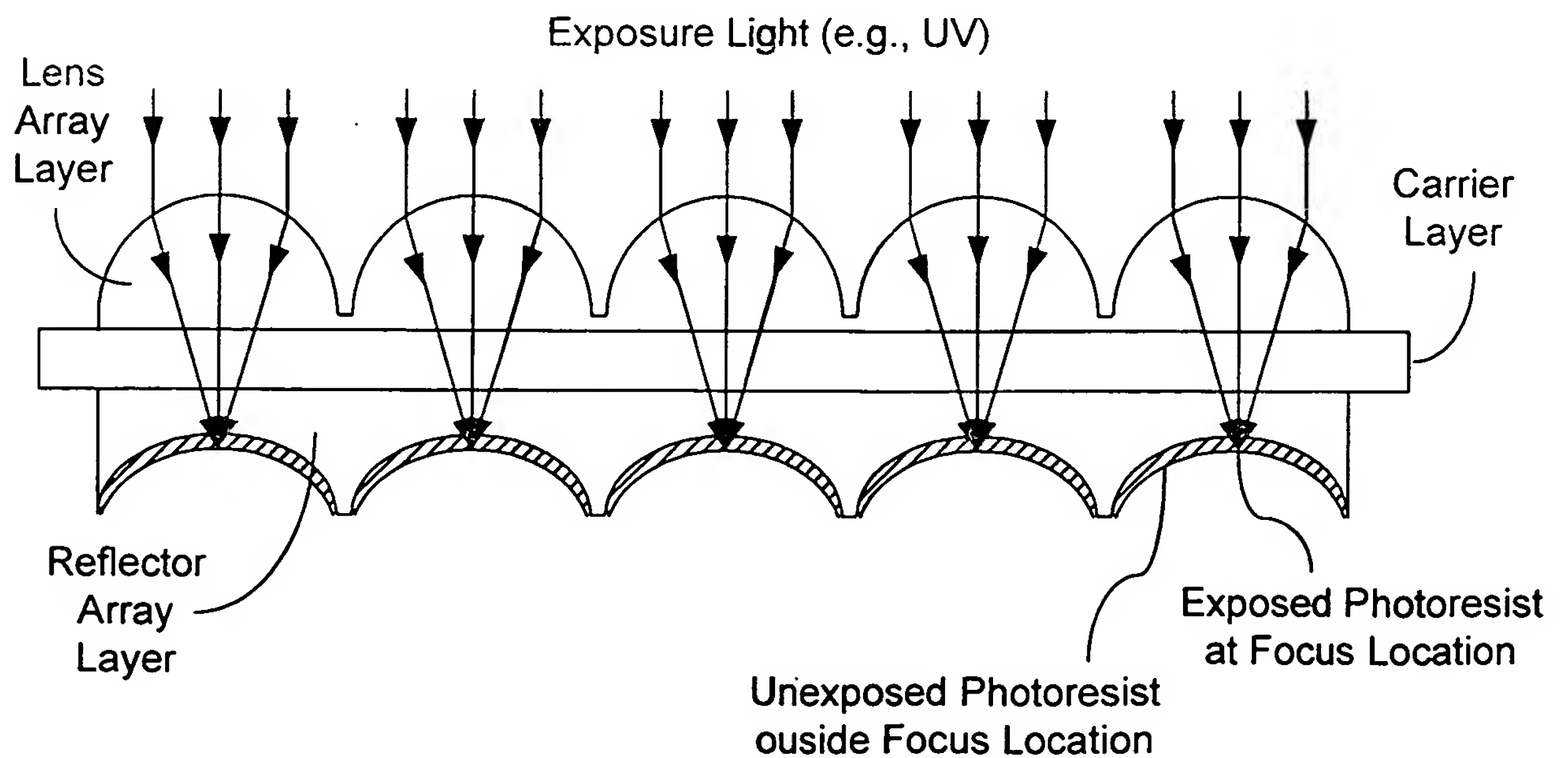


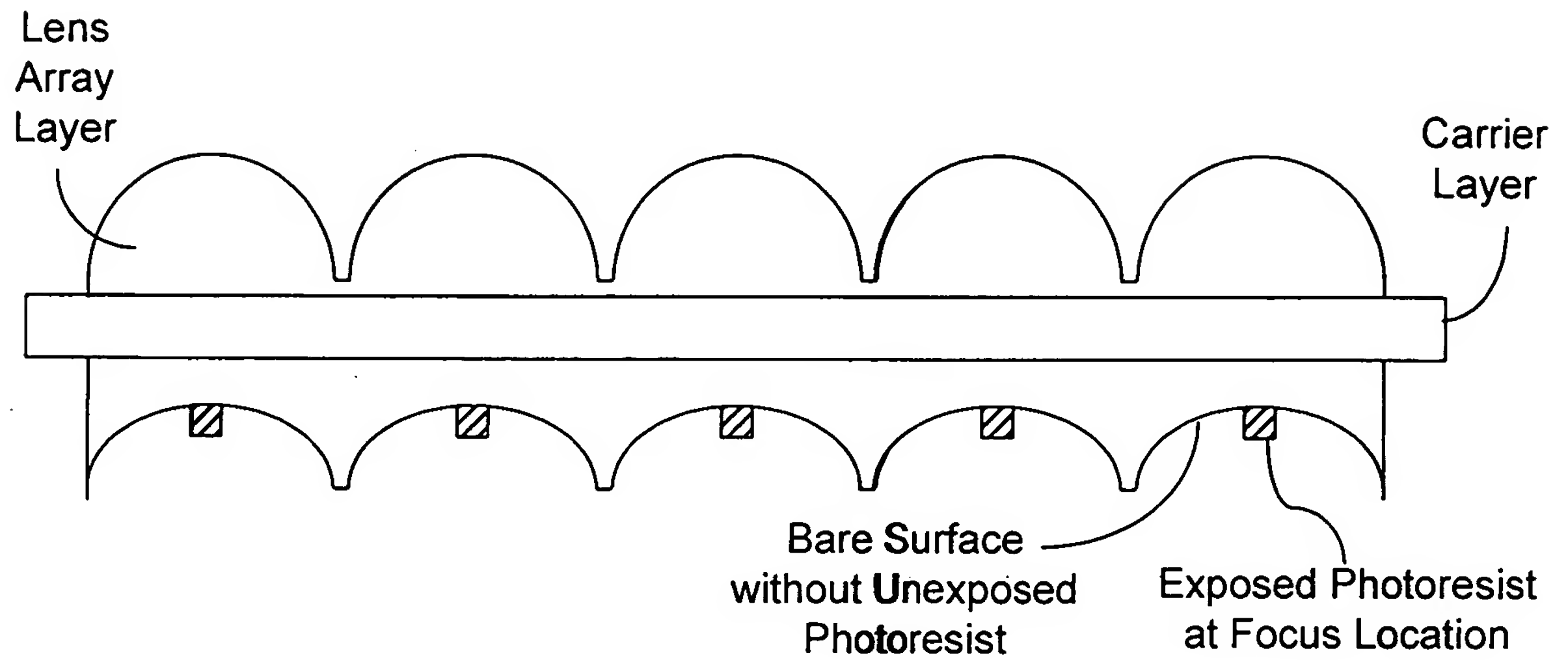
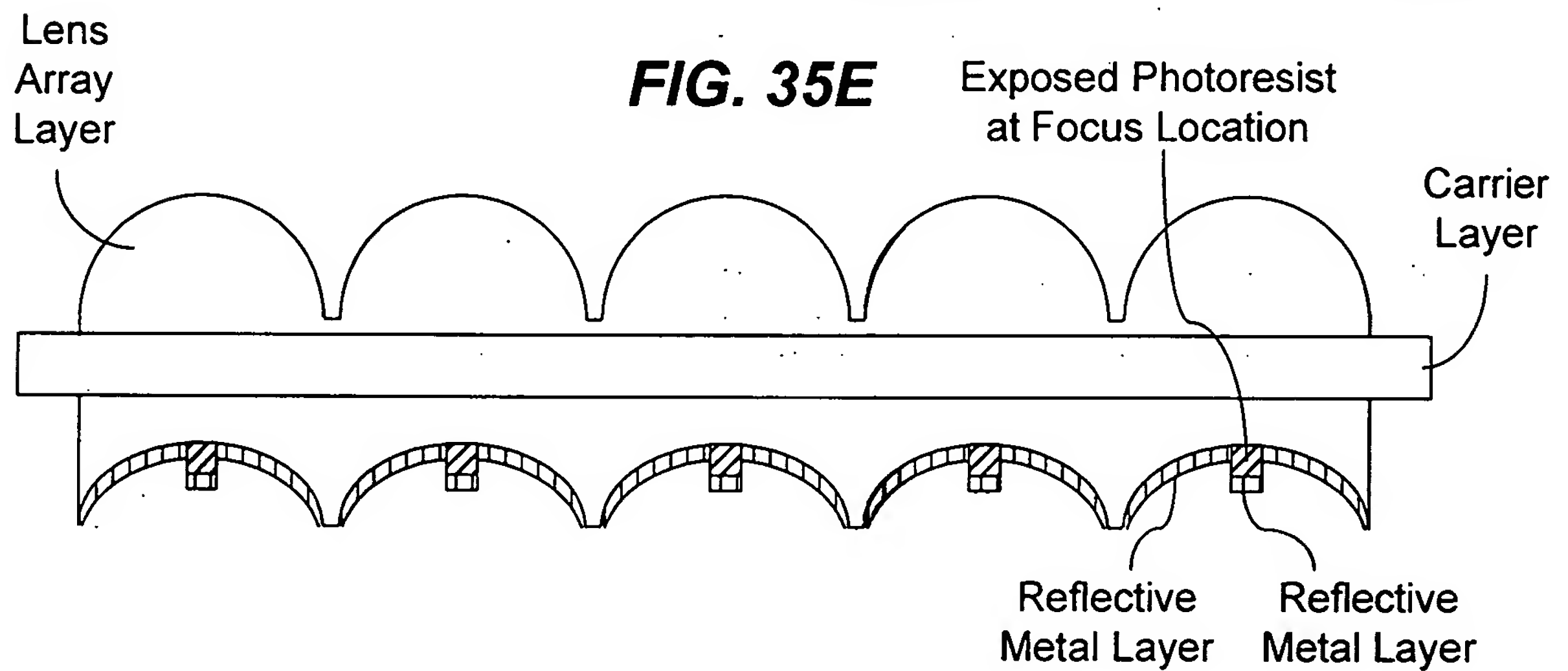
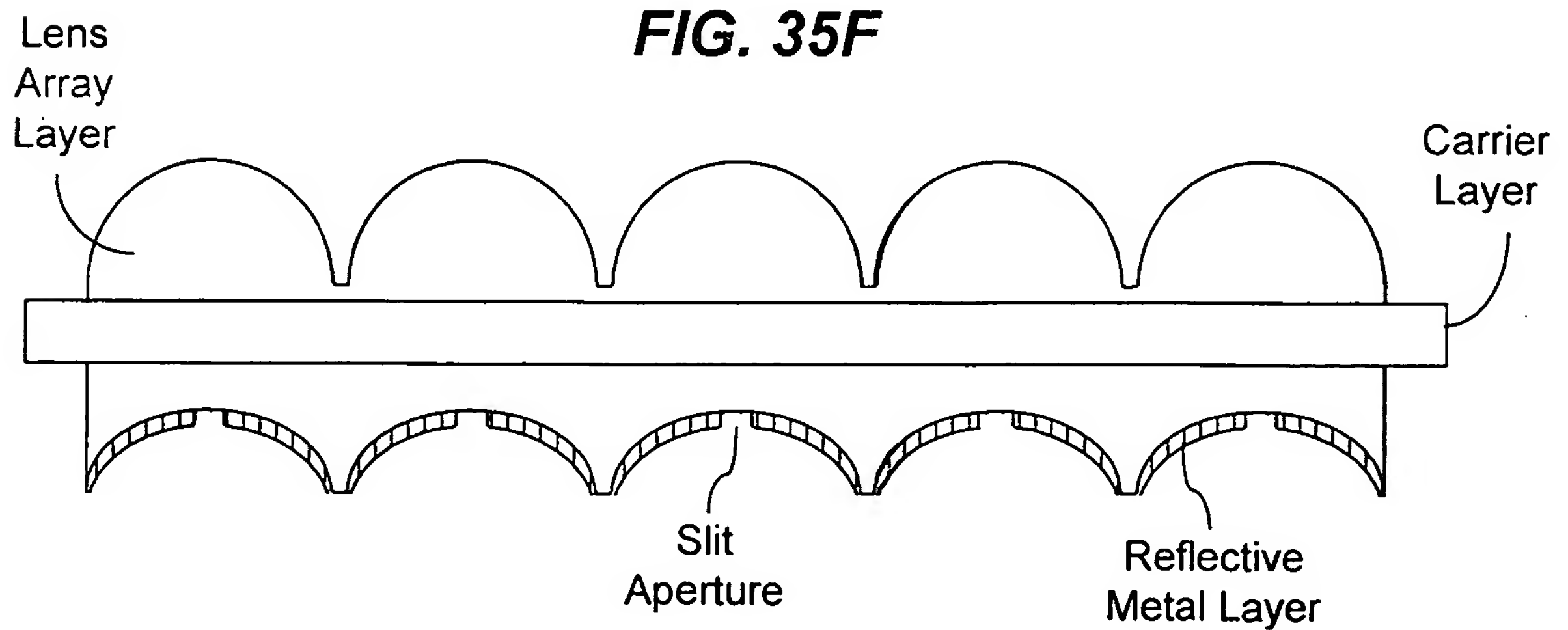
FIG. 35D**FIG. 35E****FIG. 35F**

FIG. 36

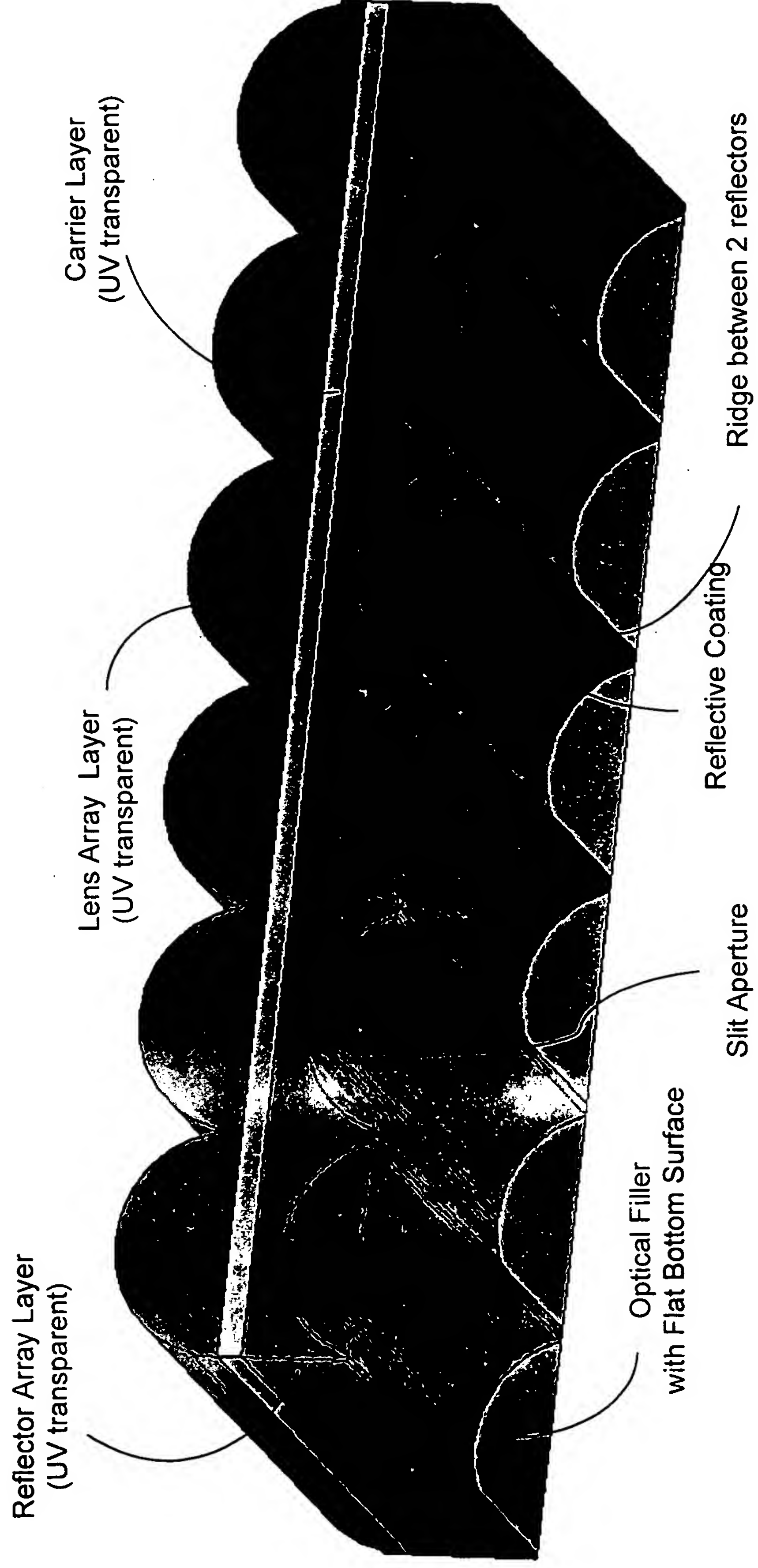


FIG. 37

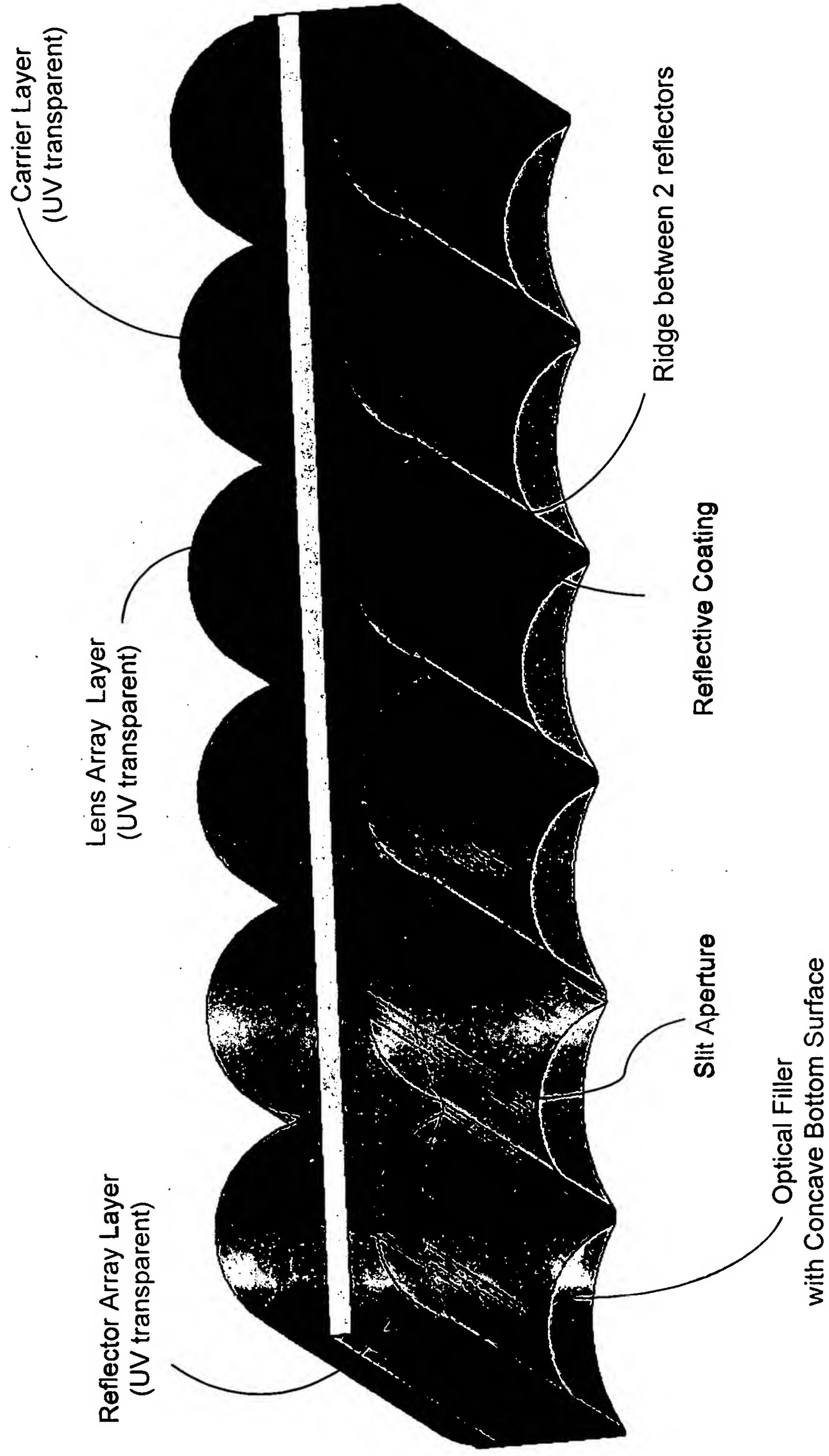


FIG. 38

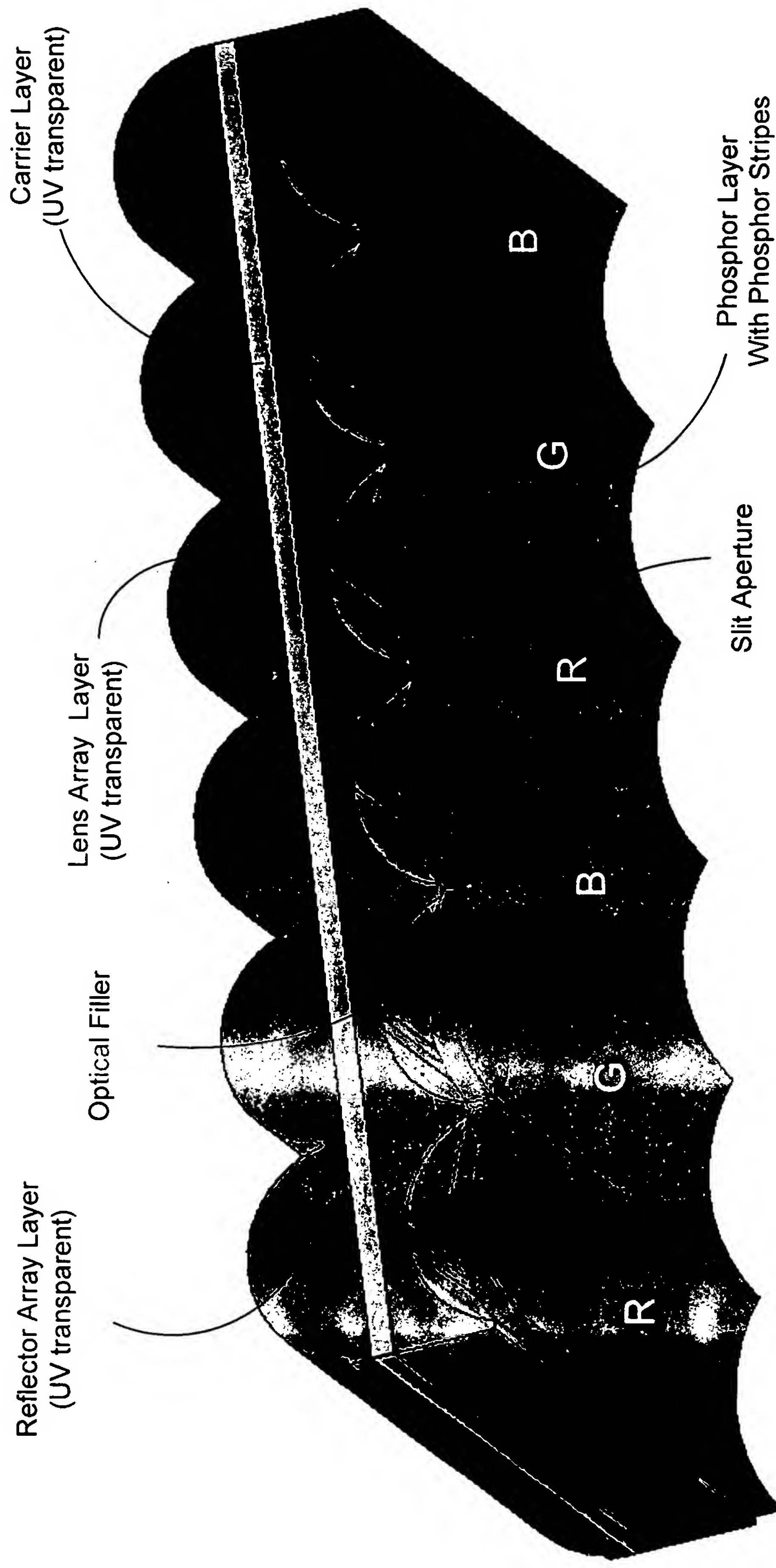


FIG. 39

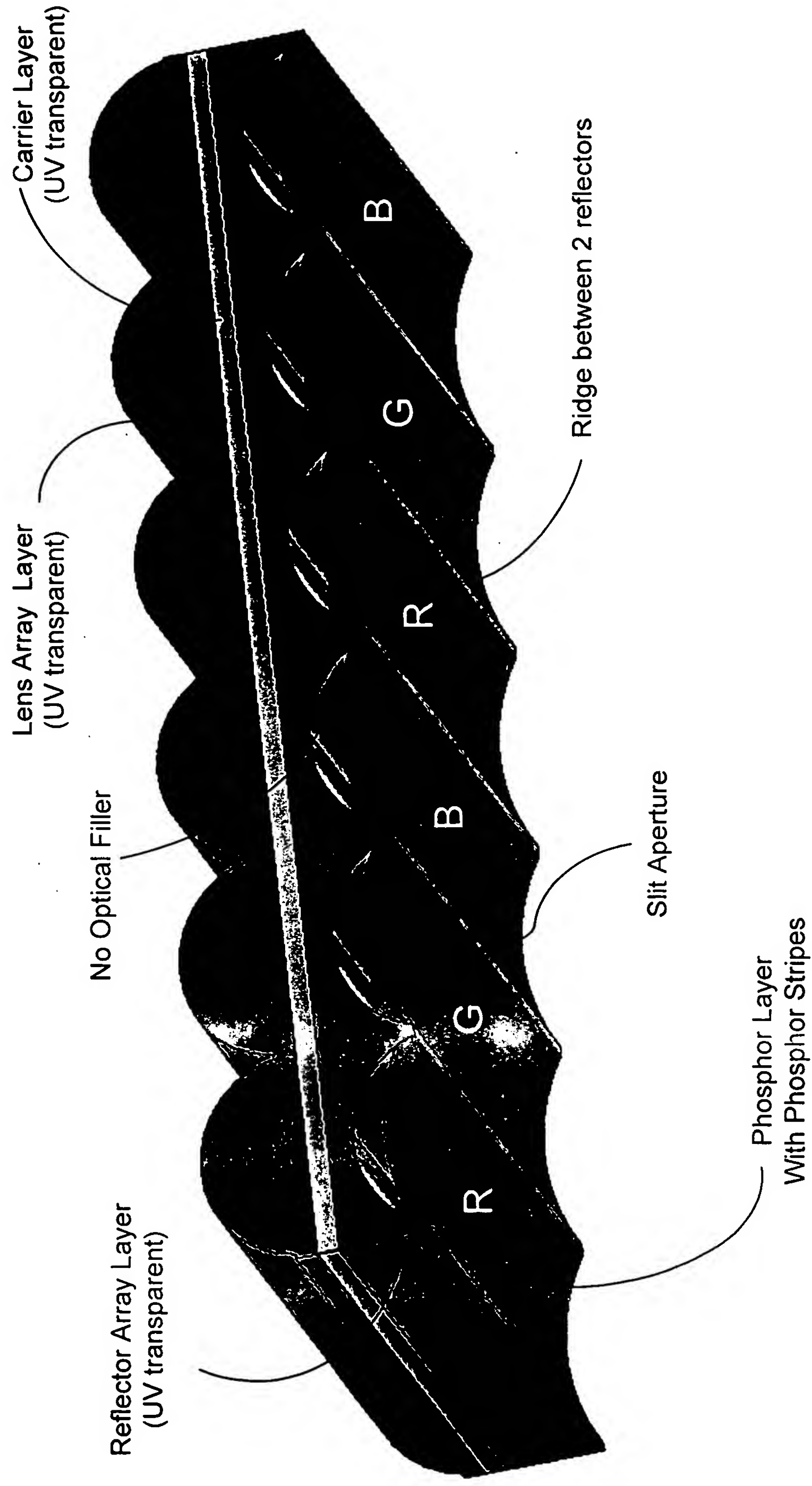


FIG. 40

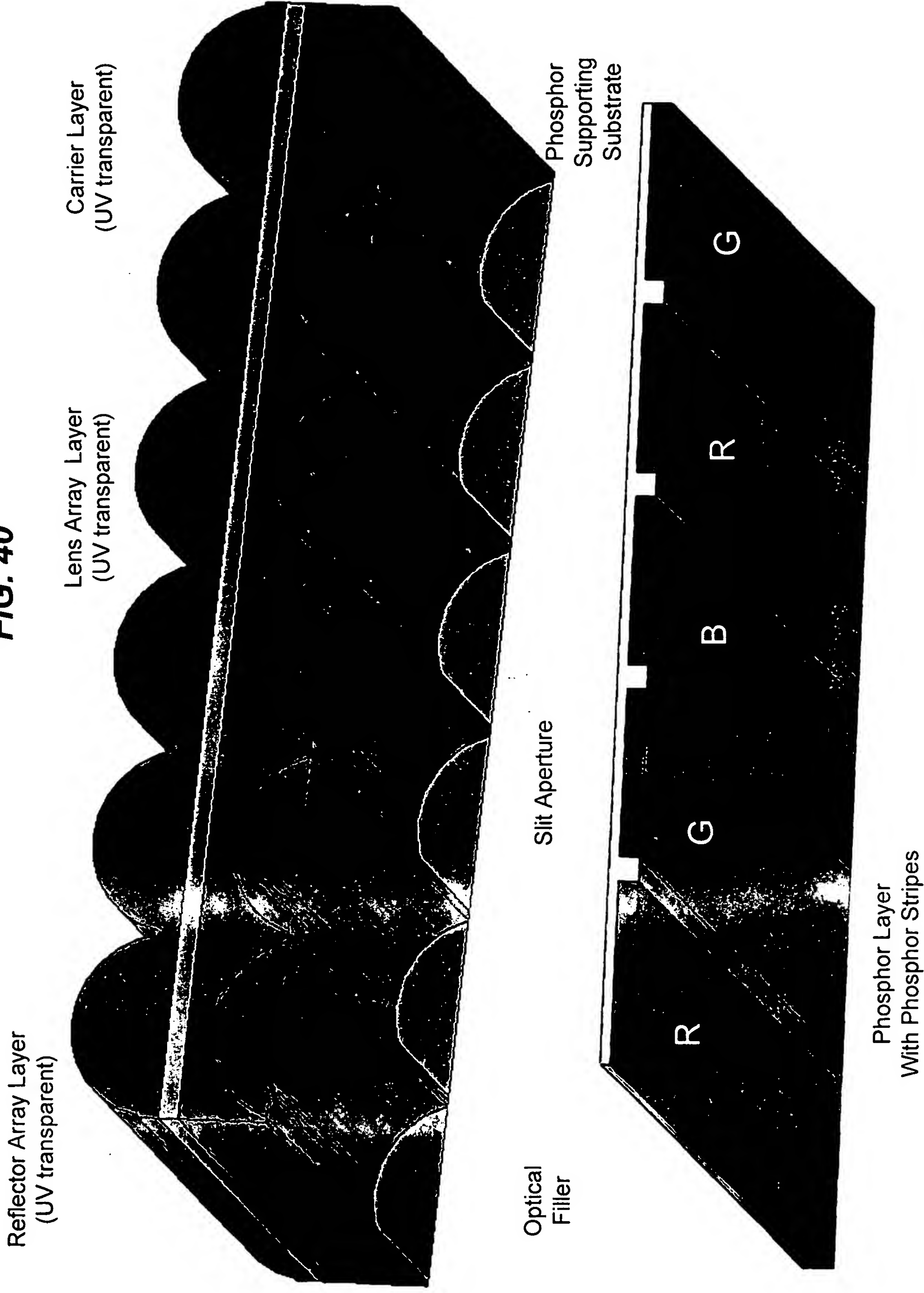
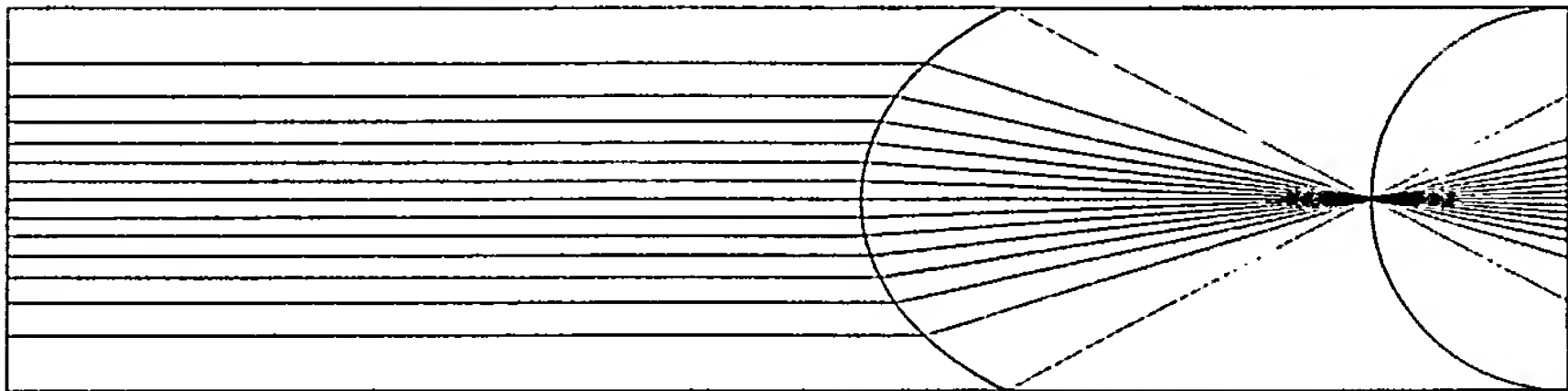
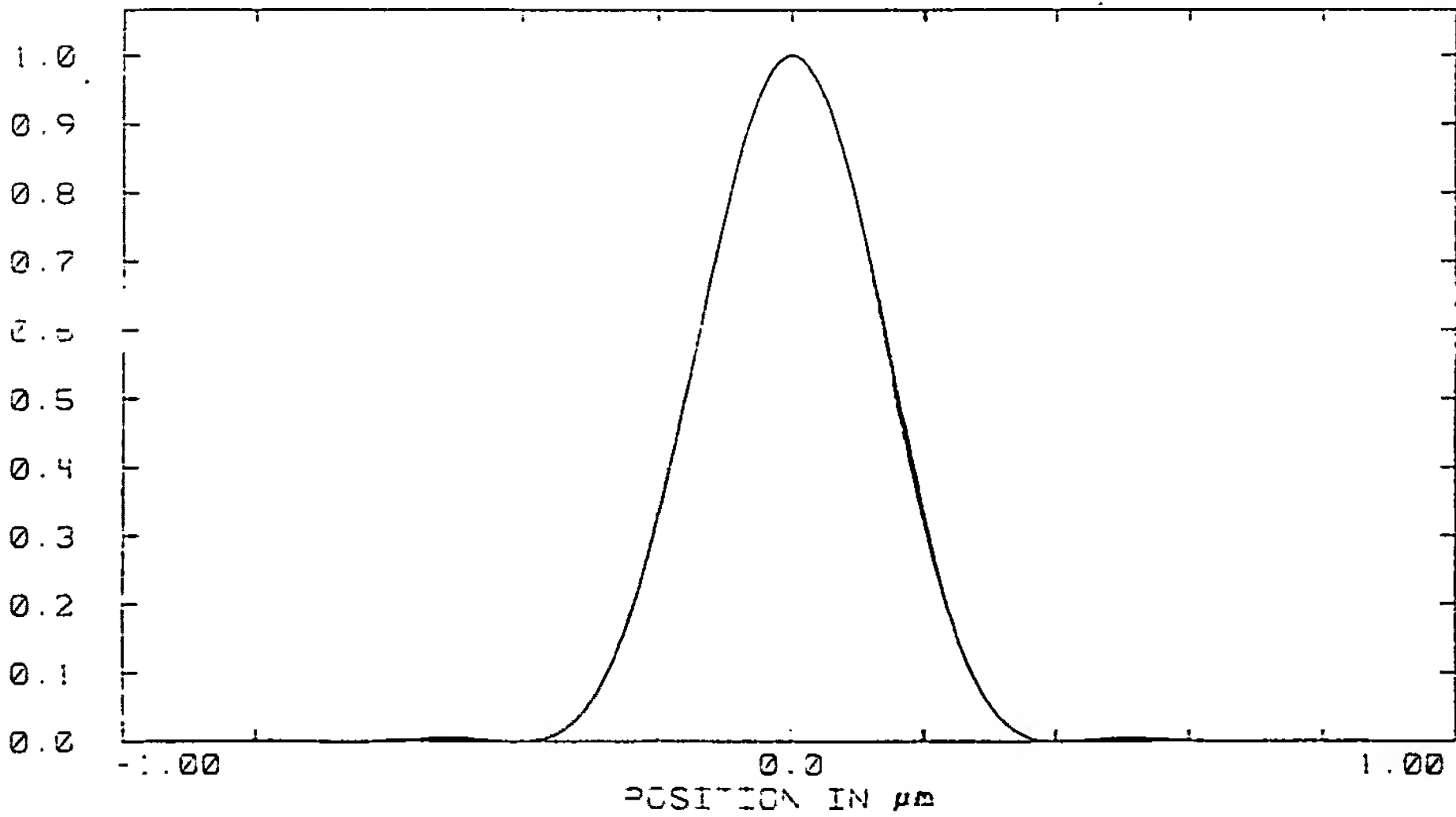


FIG. 41A



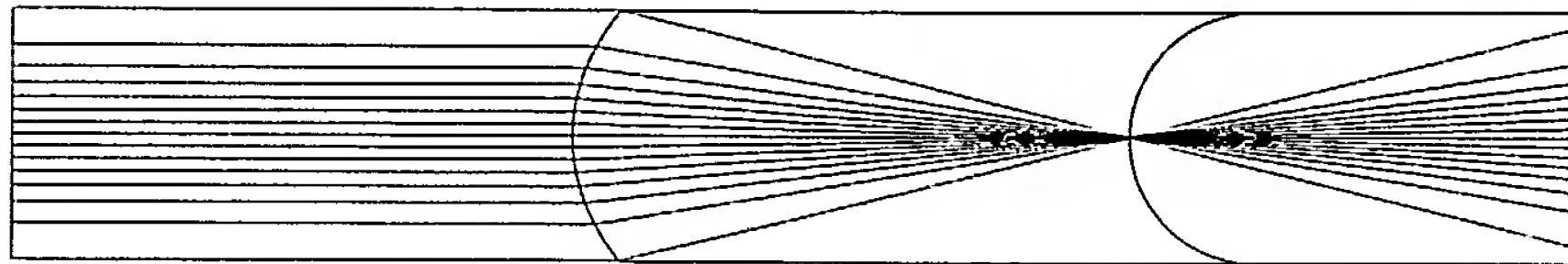
Subpixel with hemispherical Reflector

FIG. 41B



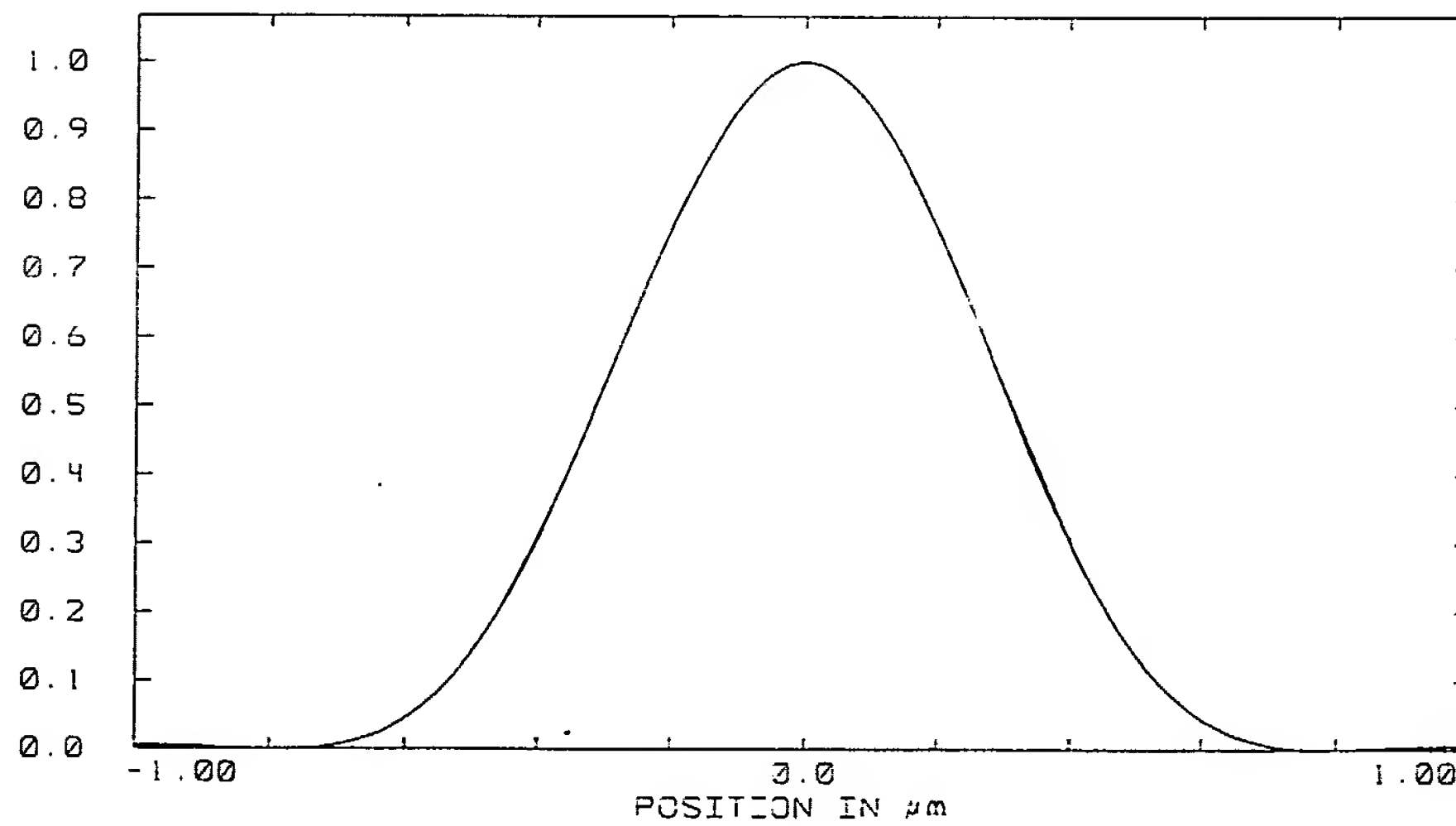
Subpixel with hemispherical Reflector

FIG. 42A

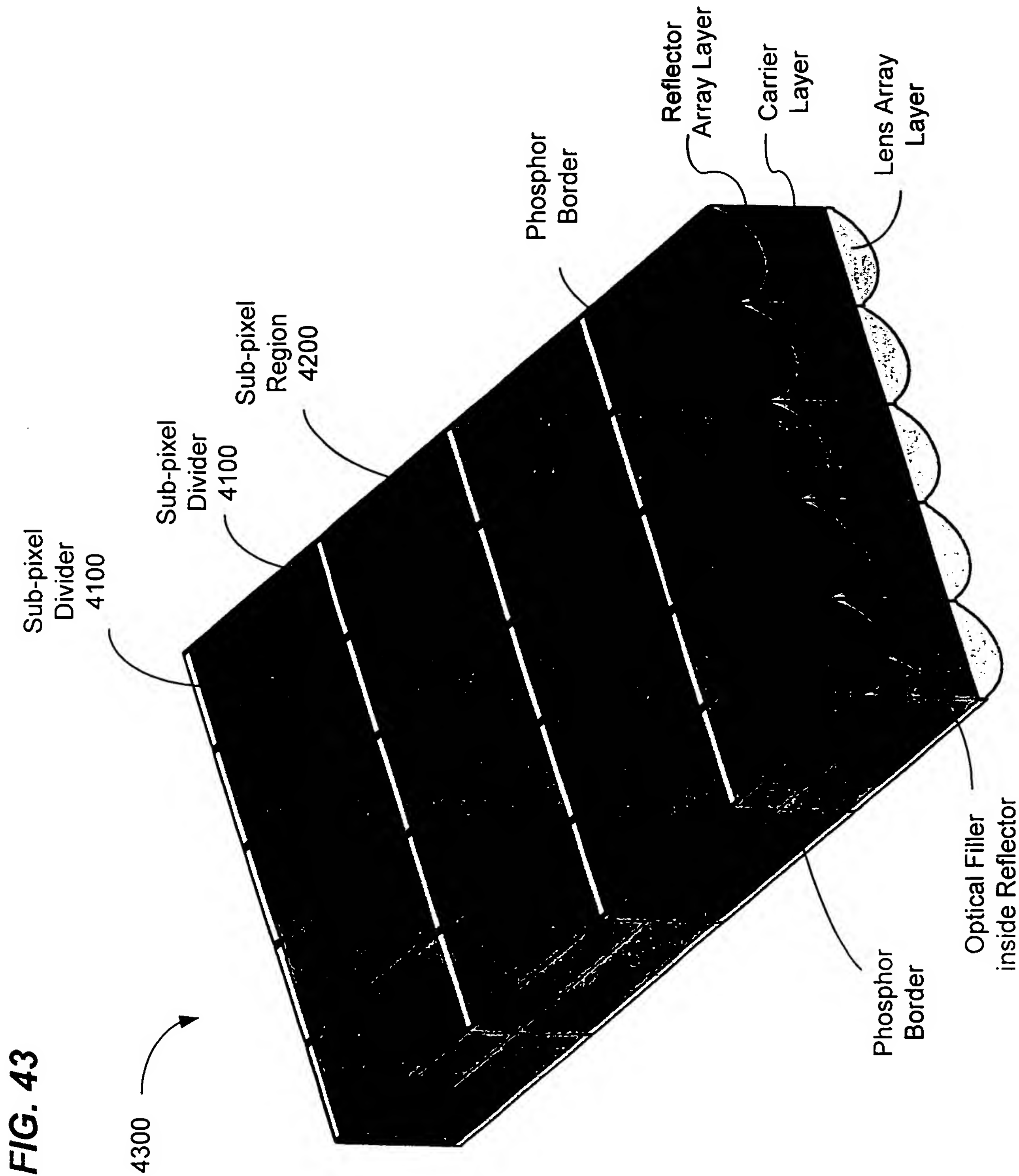


Subpixel with hemispherical Reflector

FIG. 42B



Subpixel with hemispherical Reflector



Individual sub-pixel
reflectors contain
the scatter of emitted
and reflected UV
within each cell

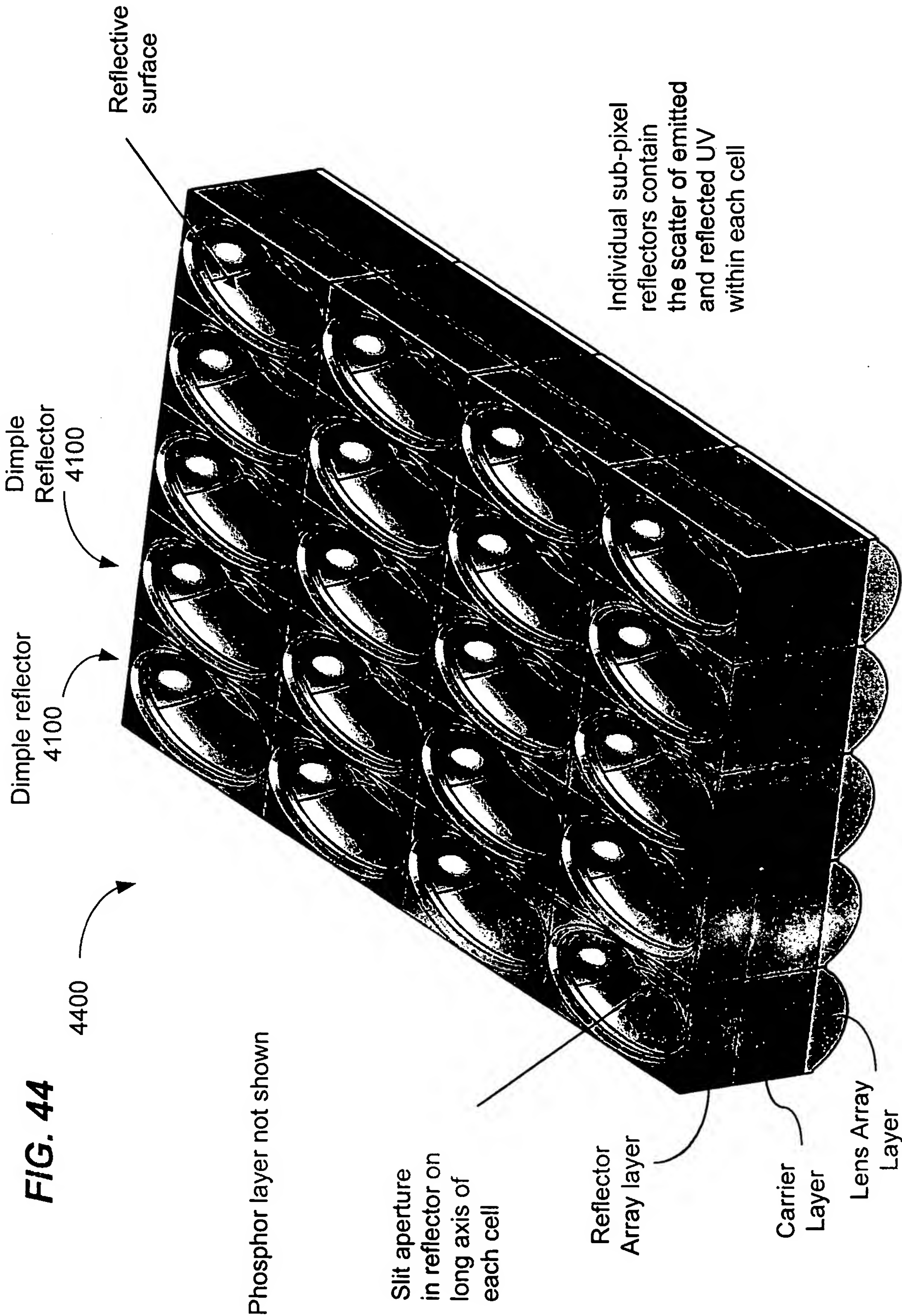


FIG. 45

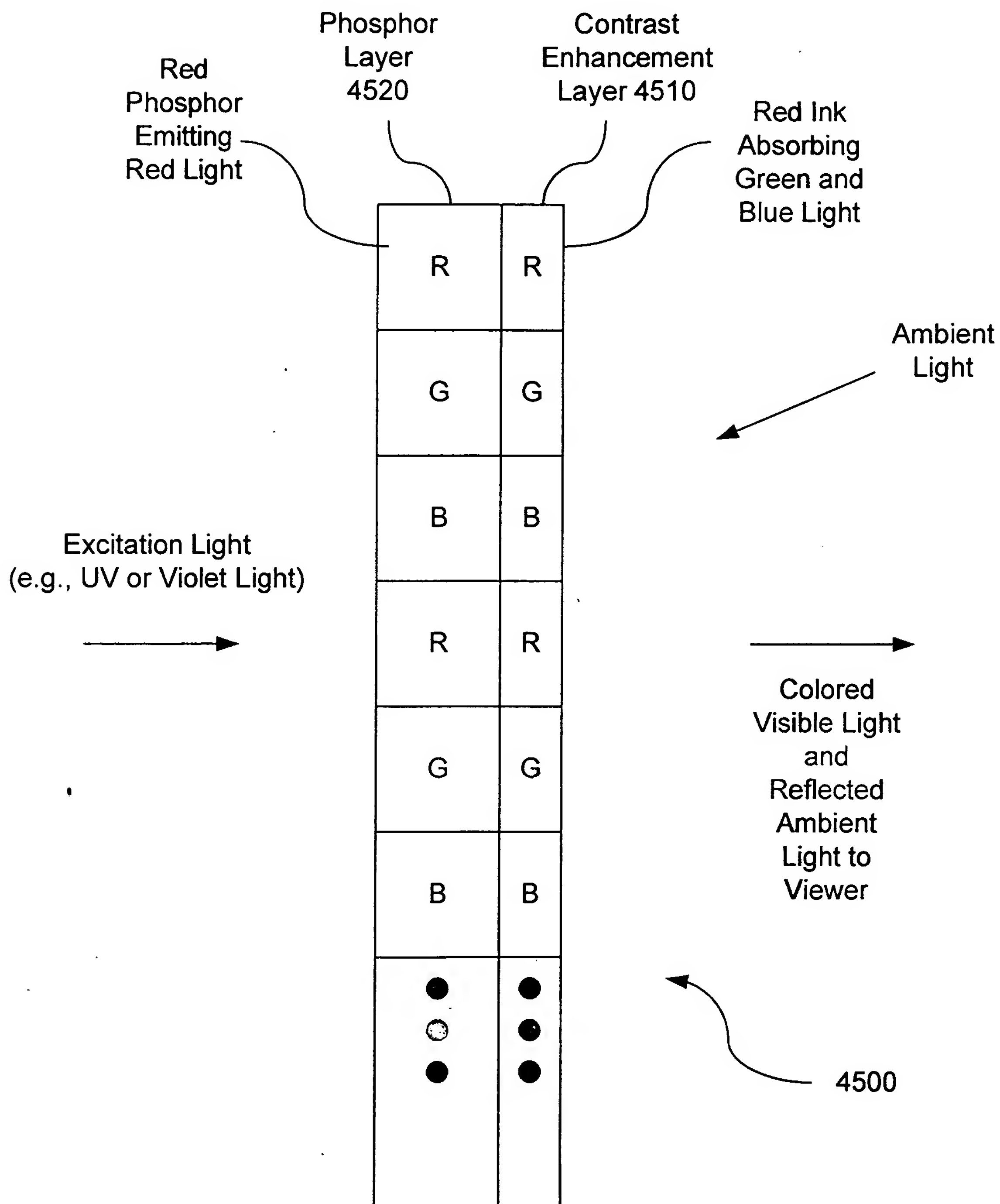


FIG. 46

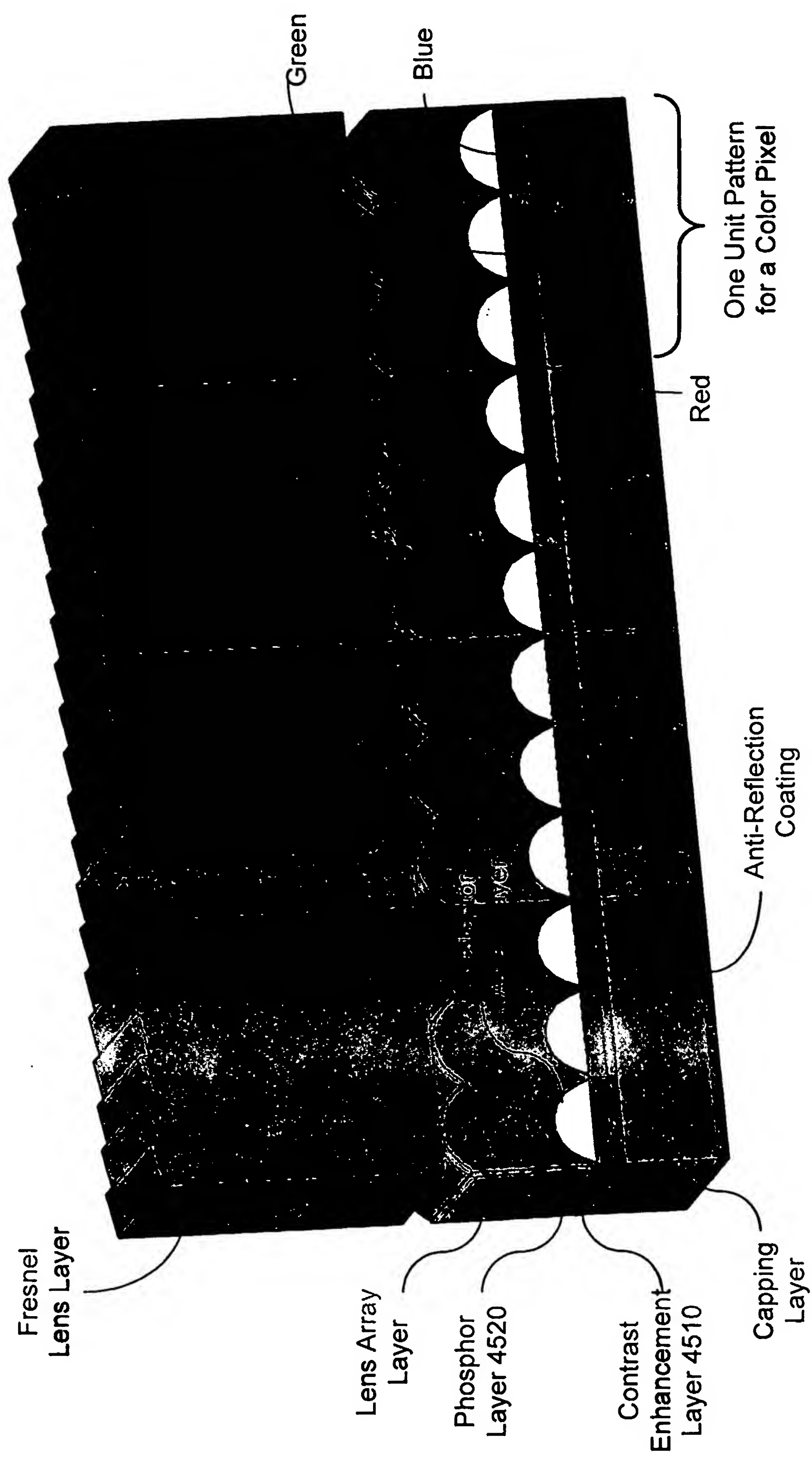


FIG. 47

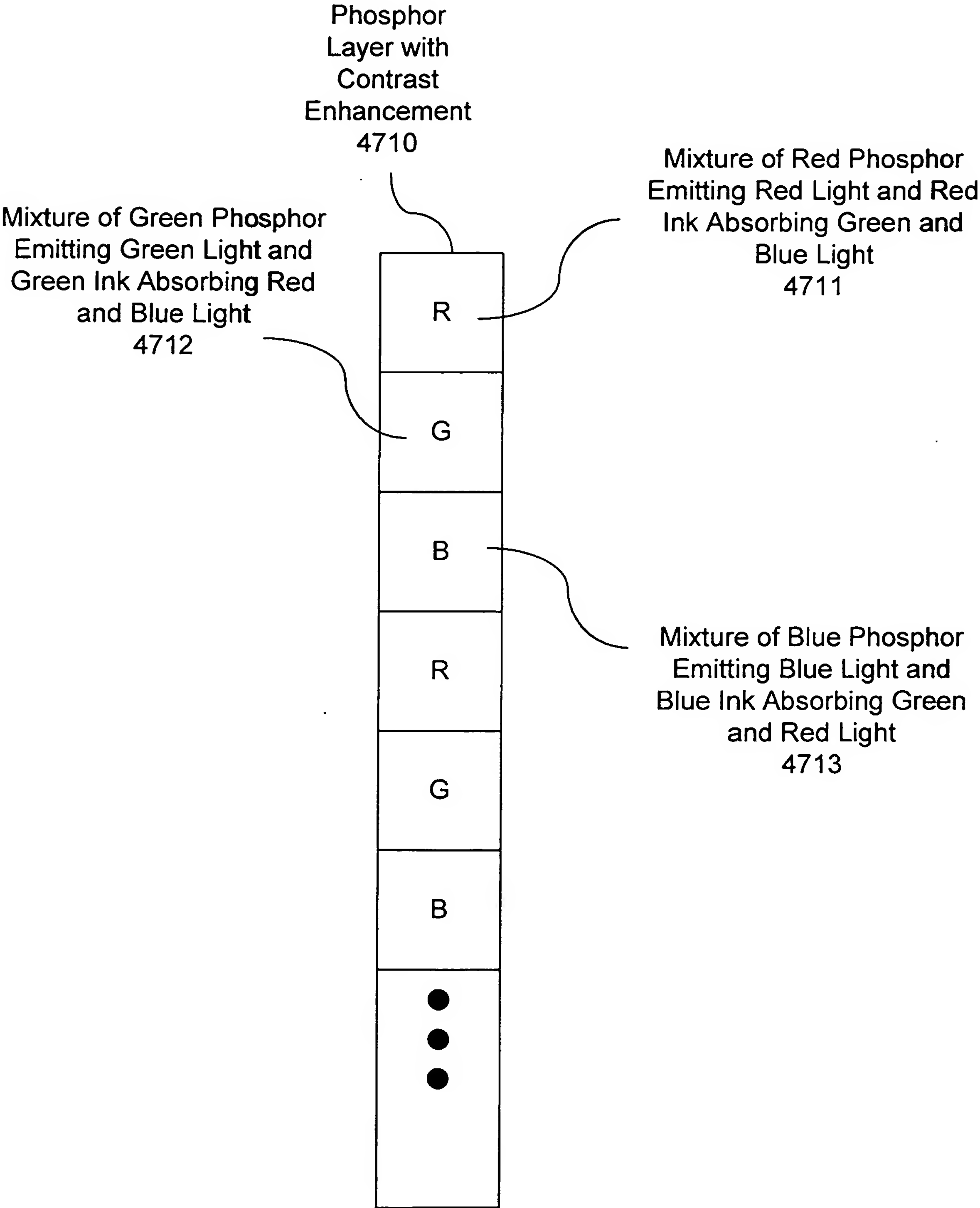


FIG. 48

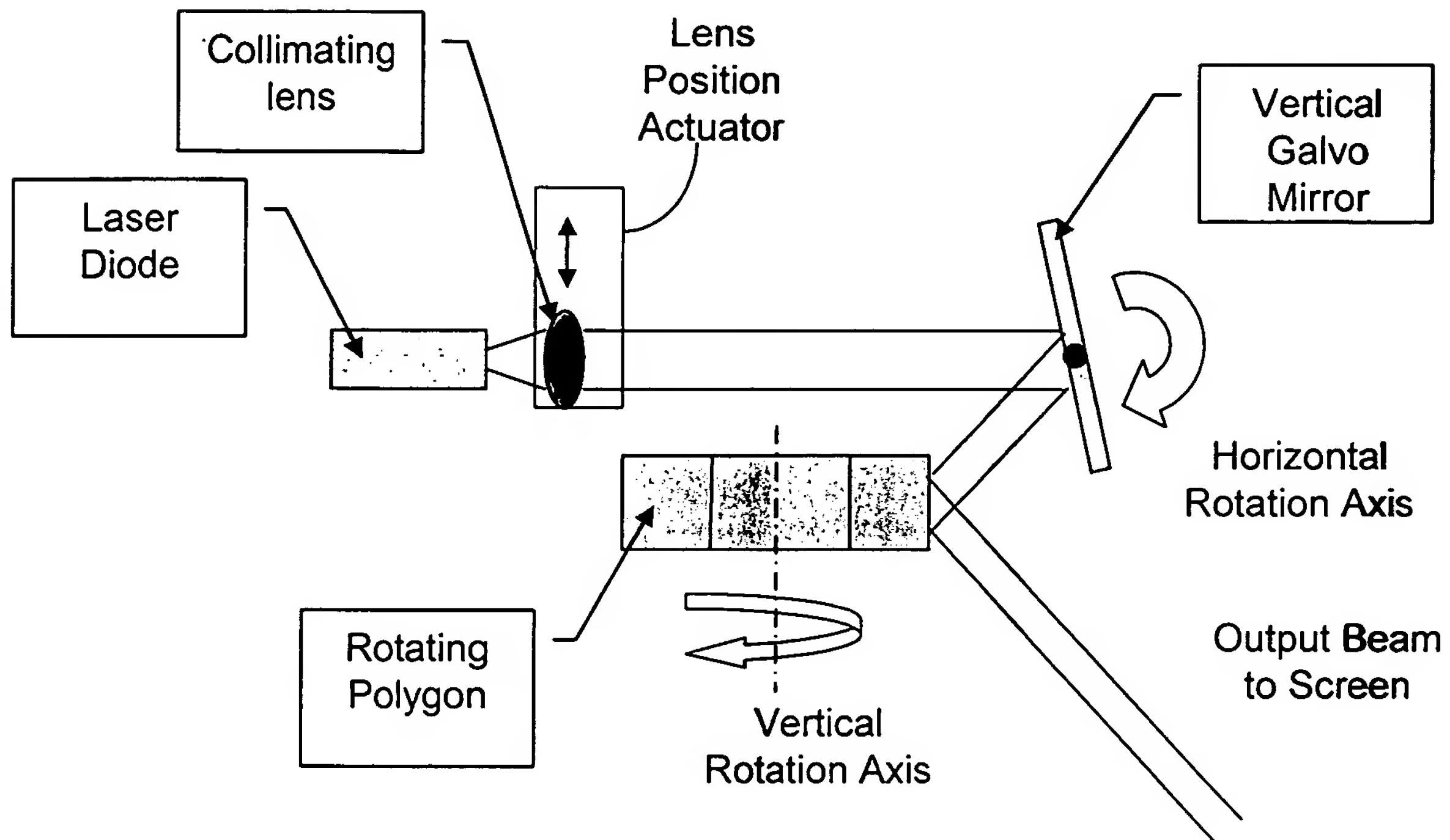


FIG. 49A

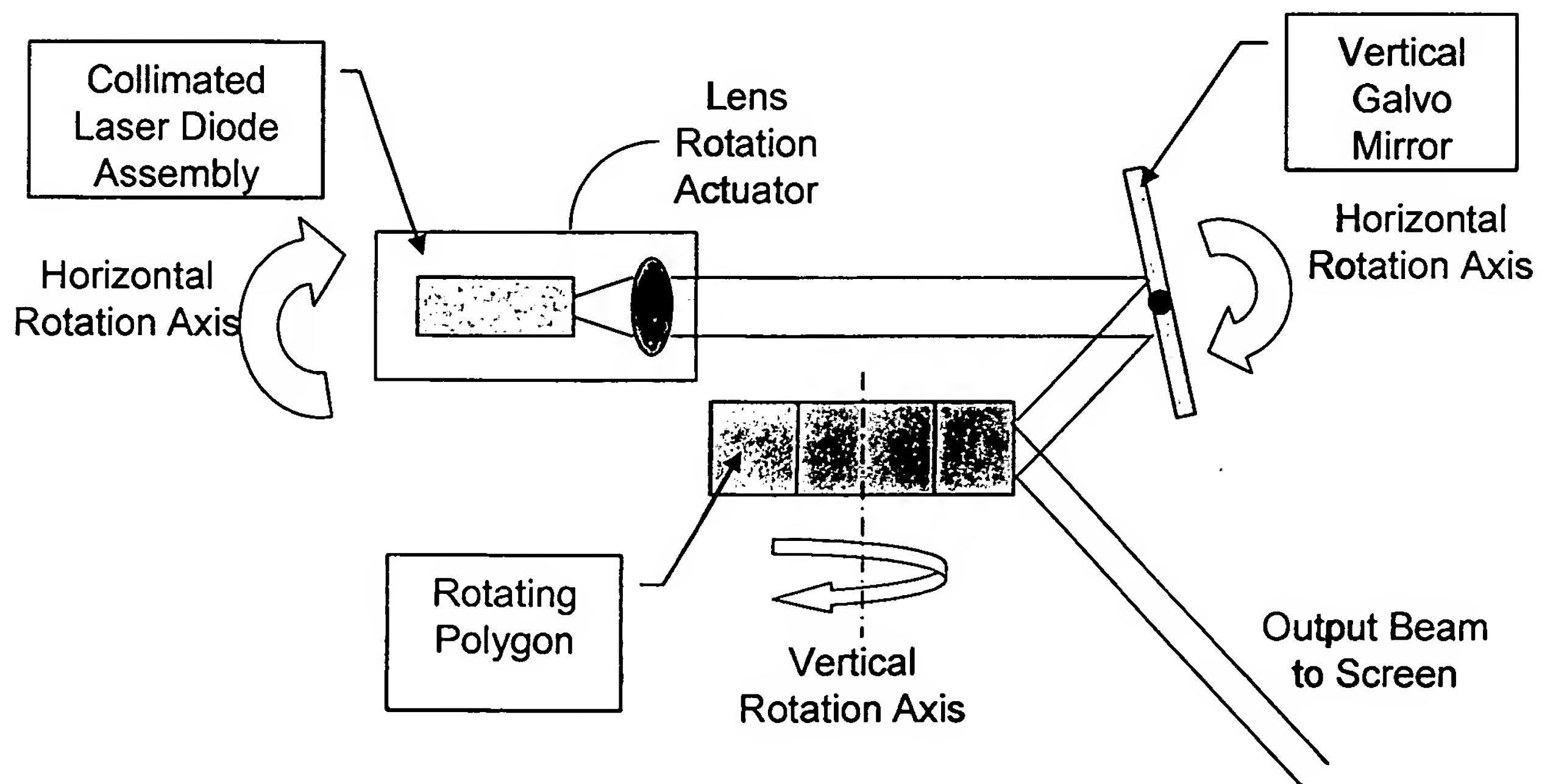


FIG. 49B

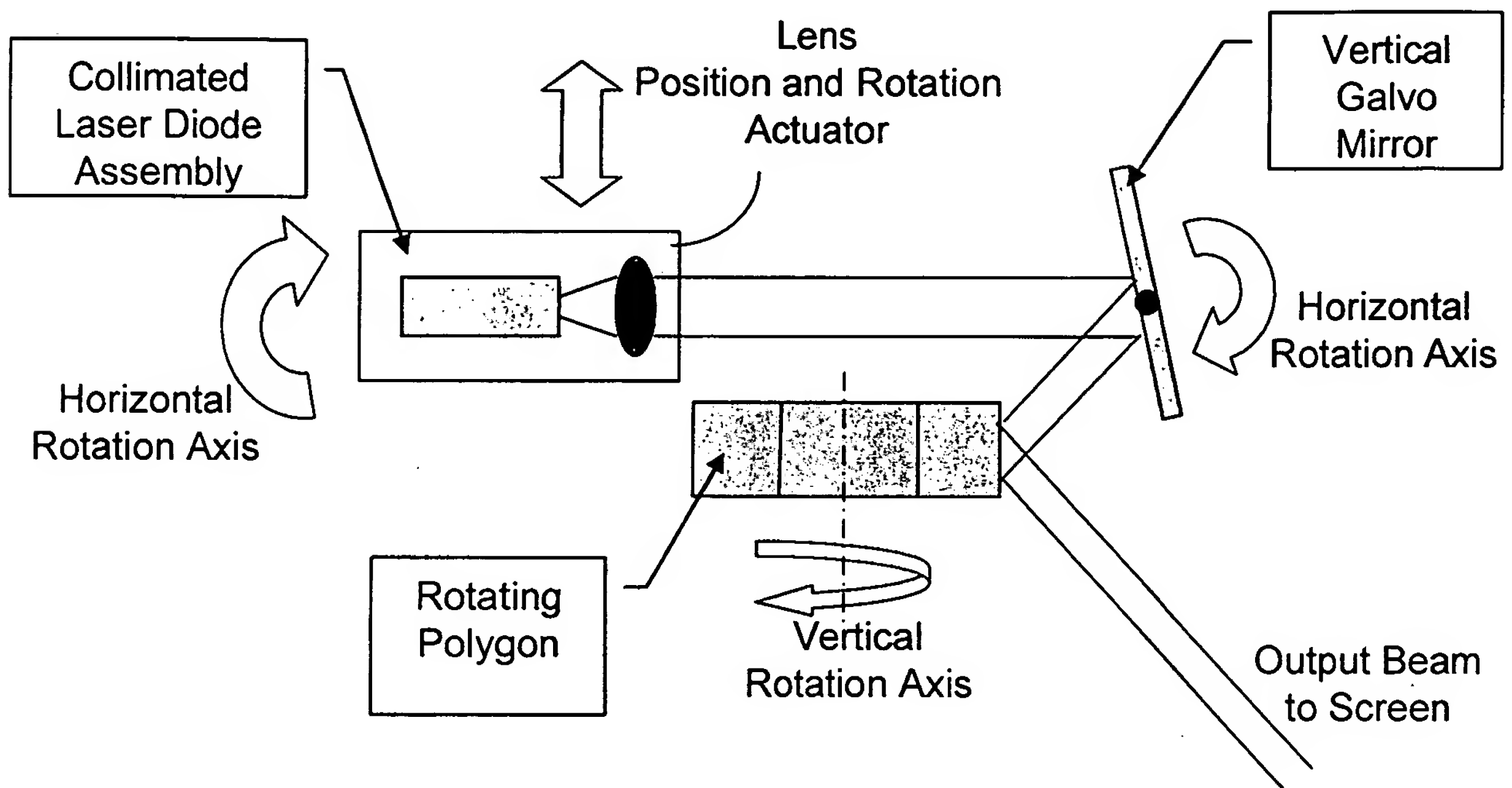
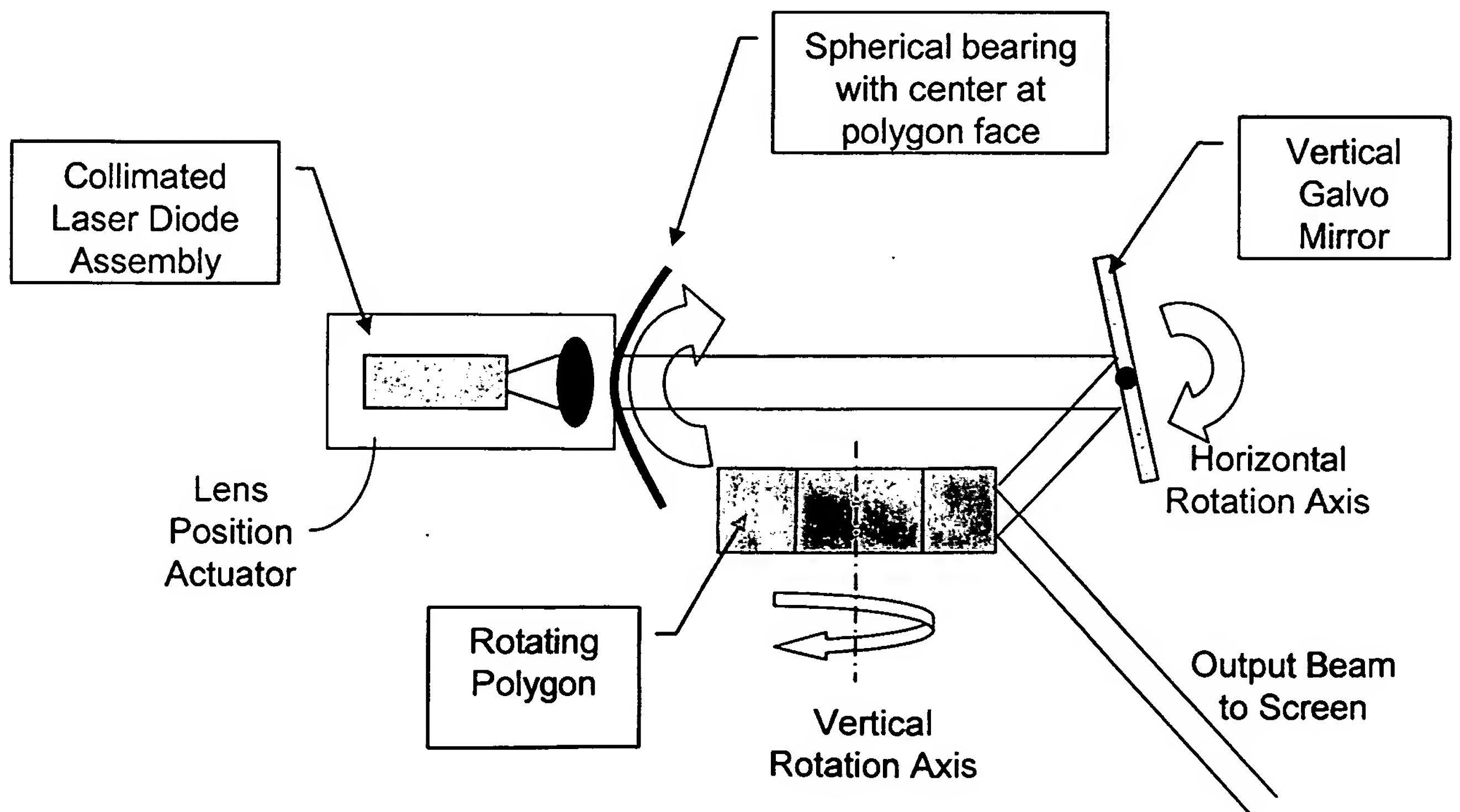
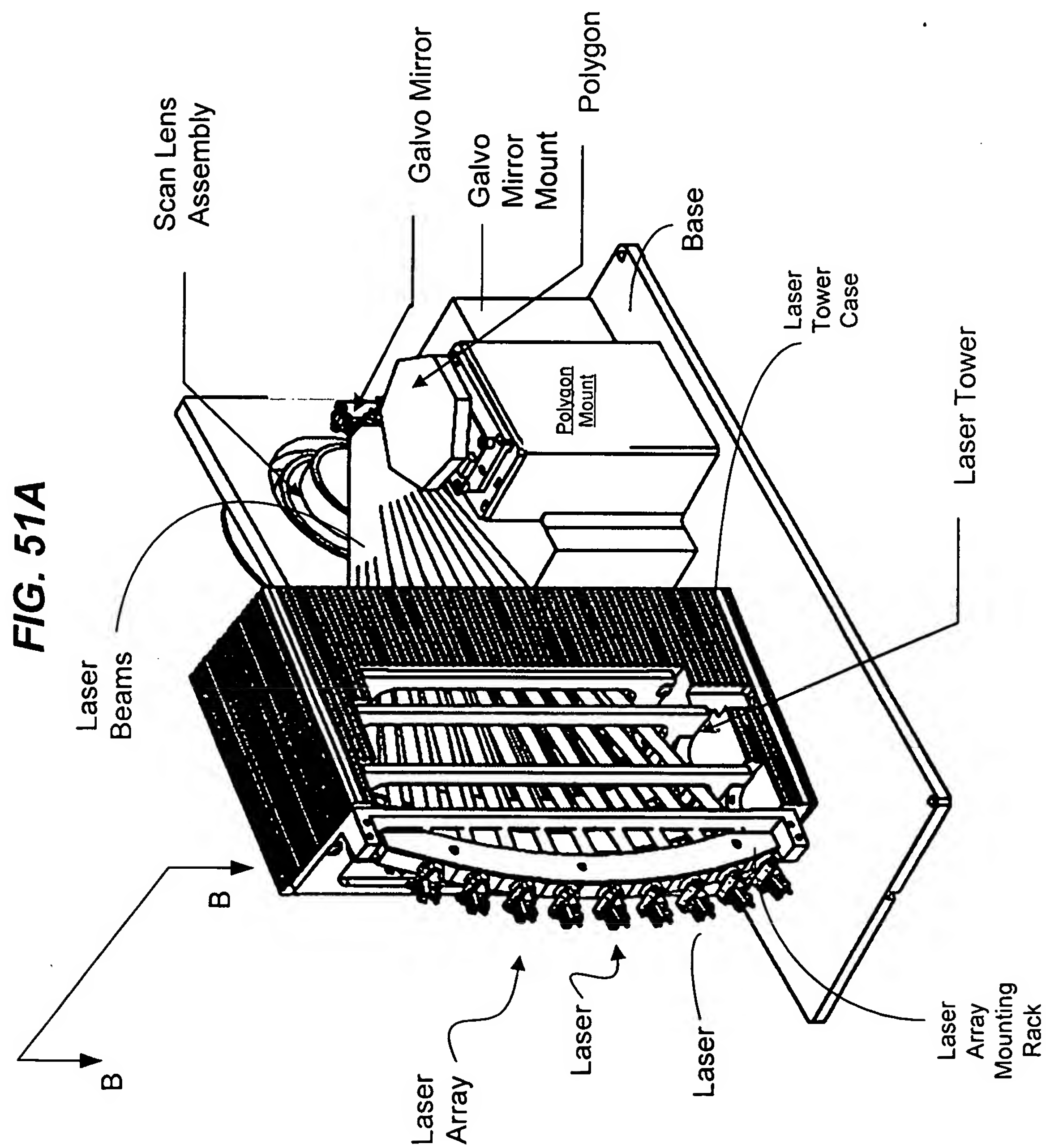


FIG. 50





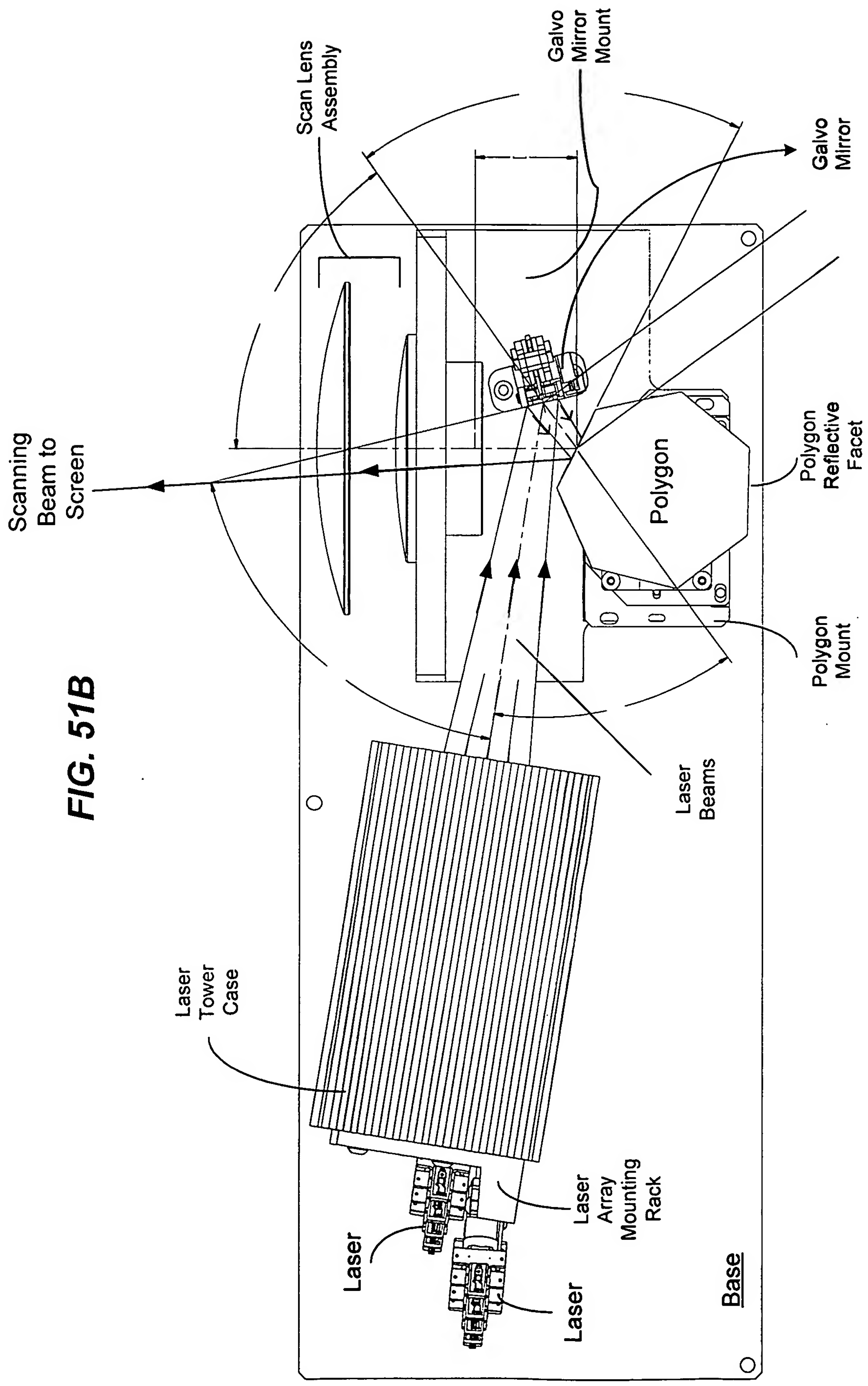


FIG. 51B

FIG. 51C

